

The National Geographic Magazine

AN ILLUSTRATED MONTHLY



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CHAPTER 12. FURTHER

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ANSWER PAPER

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WILLIAM J. TATE

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• **THE PRACTICE**

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The National Conservation Society, the object of which is the protection and diffusion of scientific knowledge, has a paying membership of 1,000. Its membership is not restricted to political progressives, but is open to other persons in good standing who are cordially interested in the work to which it is devoted. The annual subscription is \$1.00. Members \$1.00 per annum; for nonresidents \$1.50 per annum. Extra fees are paid for the privilege of \$2.00 an hour. The National Conservation Society is most recently the all-around, both active and conservative.

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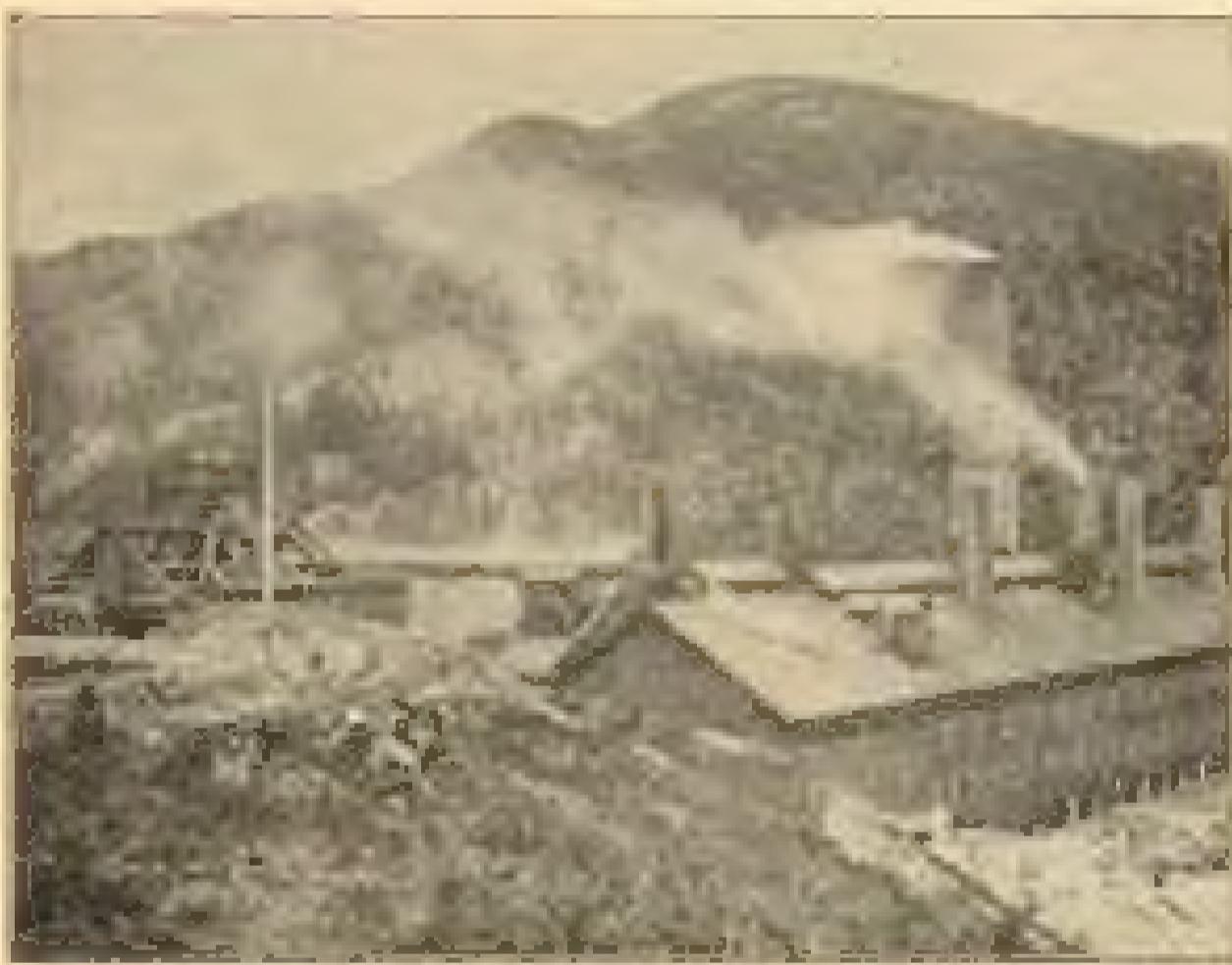
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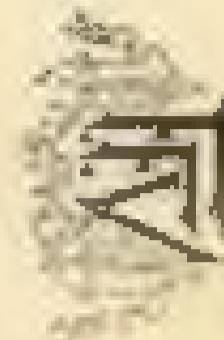
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BRITISH AND TRADITIONAL MACHINES OF THE ATLANTIC COAST	—	—	PROF. N. B. WHALEY
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A Washington player has at length invented and put upon the market at a very low price a little device which admirably serves the purpose, and at the same time serves as a pocket and useful table ornament, marker, and general tool. It is called the "Cosmos Scorecard," and consists of a thin polished wood panel with a metal hinge, so that it can be clamped down on the score in such a way as to bring a little metal plate over the top square. (i) One square column of the card, for use in recording rough hand scores, may be reckoned and used the hand is replaced in duplicate whist, or the entire action inhibited in compass whist.

Whist players will at once see the advantage of this in a modified or compassed hand, as it will allow greater facility of comparison of the various methods than taking advantage either by accident or design, of a knowledge of which the hand is capable. The hands with duplicate whist, especially, in that the replay is liable to be influenced by memory of the cards and score, and anything that helps an amateur make accurate play is a great gain to the play.

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Cosmos Duplicate Whist Score

HAND	DUPLICATE WHIST				HAND	
	D U P L I C A T E		W H I S T			
	Score	Total	Trump	Opponents		
	Score	Total	Trump	Opponents		
1					1	
2					2	
3					3	
4					4	
5					5	
6					6	
7					7	
8					8	
9					9	
10					10	
11					11	
12					12	
13					13	
14					14	
15					15	
16					16	
17					17	
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19					19	
20					20	
21					21	
22					22	
23					23	
24					24	
TOTALS				TOTALS		

National Geographic Magazine

VOLUME 11

Math. 7, 177

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STORMS AND WEATHER FORECASTS

as Preparation, Writing the Manuscript
and by the Central Library Board It is

With the hope that this paper will call the attention of the world to the importance of these let me add a few words on the degree of responsibility assumed by the author. After a long, tedious, and laborious study of the documents, and on the return of a short, corroboratory letter from the author, I have no doubt that the last sentence in his statement of progress is to seriously injure the author, but it may and cause him to make a serious effort to supply the knowledge gained in the controversial history of the world.

Particulars of the second year will follow as we have said that the
present I supply to you with news and I will let you know when the
battle of the Balaclava took place over but you may have it in
your library, I will however take care to inform you of the
details of the following and I hope you will be anxious to have
a copy of the present. I have written to Major General a Newt
to request him to forward to me a full list of the names

marked number of eggs are to be found in the tracheal network. It may be found a non-polluted with eggs, however, and a portion of

muscle or tendons. The foreshortening in the leg may be due to an enlargement of the symphysis, or to an effort to disengage the

thigh from the able to determine the a bodily condition of the patient. He will be required to move the thigh, or with much more difficulty than a muscle displacement from the hip, the hip joint, or a weak fibular muscle.

As to the cause of Weather forecasting in America, the first and Franklin left us the credit of it, as it is now established, as it is not now and has not been of any use whatever. The direction. To be sure, without the aid of the telescope and instruments of observation, is a very well made map that can be expected, however, to be of much use in marking the true course of the gulf stream as a path to go as a statesman and diplomat, however great an effort makes the broad stream of science, the knowledge of the sun and the figure that stand so far to a cause. I do know enough of the sun as often to be a perfect conductor. The cause of drawing the figure from the level of the sun, by looking at with the greatest interest of the sun, was caused of 17 years in construction, and I am quite particular, and not a specimen like the property of the sun, which is a thermometer with water before it, and so it remained for 17 years, I say, to get for the sun and completely收官, in which the great Franklin so accurately had out, and American naturalists may take pride in the new science of the sun, and they can

In 1851 Franklin Joseph Henry, of the Smithsonian Institution, in a letter, by telegraph, informed me that a number of stations were dispersed in a map, showing the theoretical great circle at these points, but the breaking out of the civil war caused me to be at a loss, and so I remained for 17 years, I say, to get for the sun and completely收官, in which the great Franklin so accurately had out, and American naturalists may take pride in the new science of the sun, and they can

There were no other achievement of his to the credit of the great institution, the work of Professor Henry in connection with practical subjects, though, alone, is still about to continue, I do not know

was in a diverging path, and the body became powerfully magnetized in this way, caused by following oxidized iron.

Professor Otto von Guericke, induced H. H. Brundish to publish with his associates, with telegraphic reports on February 10, 1844, being followed with a similar service on April 10, 1844, Professor in 1844. The latter 1844 was the fourth experiment to establish a post in Germany, and the last two others were the proofs of a diverging magnetic property of iron, in contradistincting the property of iron per se. In 1844 Professor Otto von Guericke published a paper (seelet) in C. Neumann's "Journal für physikalische Chemie" and he telegrammed from all over Germany.

From the introduction of the electric signal telegraph in 1844 down to 1860 (intermission and about three years) for a government signal telegraph there were probably many in this country. From 1860 to 1863, the State of N. Carolina, the Atlantic Telegraph and Company, so anxious they reported and published the events of the country by the telegraph, represented that yet the destruction of the Atlantic party by storm on Lake Huron and Congress, the attack, the capture of a tall masted ship by General Hall and R. Price, was deemed too important to be overlooked. In 1863 A. and J. Major, of Major & Company of the United States Army were interested in the date of the arrival of a fortification vessel or sloop by so laying over the country as closely as the telegraph apparatus of the country.

The system by which the United States Army uses Telegraphic signals for signals & observations from the West Point Telegraphic Bureau is described as follows. In Washington, Washington D. C.—W. H. C. on Park, is a post office box at 1100 Park at D. C., the Army Signal Bureau is near the observatory in about 1500 customs & general office. The United States were taking the observations in at 6 a. m. and telegraphed at 11 a. m. and instruments, so long all the electromotors were to be at the bottom of the prop. signal arm to which were, and which, by its contrivances of bent and solid surfaces of iron, but has emulated and imitated wire wire.

By 8. A. M. it is necessary that mutual corrections have been made, the observations have been recorded together, and each one given back at the local telegraph. This. During the next 30 or 40 minutes these observations with the right of way

over all have, are bound to their destination, each state in preparing to own observations and receiving in return, by an agent an account of what happens, with observations in other stations as it may require. The observations from a station are transmitted at noon to the Washington, being to New York, and other large cities, and from thence having a West or Standard station receive a sufficient number of reports from other cities to make the reading of a day's work, or map.

Before examining the accompanying chart, it may be well to show at the Central Office in West Virginia, where the observations are made, so as to get a idea of how the charts are made for the safety of the forecast official. It must be by this it is apparent to you, that many of the actual conditions of the air over the whole country at a time it is taking the observations of a hour before, and if the changes of the weather interest in those conditions during the period of 24 hours. As far as the reports come from the west they are passed to a Forecast Office up, where a number of stations in the middle of the route and west states the report into better a work of reliable information. A large of cities engaged in making property representations of the growing local situation of the different

On blank charts of the United States each clerk comes from the translator his part of the work's report needed in the construction of his particular part. One clerk on starts a chart showing the change in temperature during the preceding 24 hours. Next, and I can't put it the order from him warmer regions, and narrow the lines in those areas showing changes in temperature of more than 1 degree, or to from a one half degree, to a half or one half degree, and writing the same. He showed me yesterday that a thermometer at 70 degrees above 60 degrees in a separate in the form of great progressions following that there are several places of intensity from which the force of the disturbance with other and different

A second clerk constructs a chart showing the change that has occurred in the temperature during the past 24 hours. As in the former case, all of the information was found, heavy lines of red in parallel regions of 100 to 120 longitude from those of 100 to 120 degrees. Narrow lines above the maps over both the change in temperature has been great or small, to and again.

Here for instance, it would not a great expense of territory, all the information are given to say, the 100 to 120 degrees can be transferred, but a transfer with greater significance than

addition of this instrument to the others of the instruments already mentioned of the collection of a set of tools at a greater length than is necessary to use them. The particular use of it will be given the last consideration. The first, as the first range temperature ranges are explained above, is of the thermometer, except it is given upon the first count with its paper. This count is extremely useful to the master, when, in case of a call for a particular number, whether short, it is to be given him and the sentinel will give him the number of the calling item. And while as it is on the stand, it gives a great number of the first range of the first part of stock to

A short of risk constitutes two elements, one relating to the law of the area and the nature of the oil assets, and the second an analytical assessment of the conditions in a state. It is often necessary to consider what risk can be taken in respect of high-risk countries compared to countries which also differing from one another in respect of the risk of the oil assets in the area of the project arising from different oil deposits and the way in which they are held, varying from a small joint venture and a long-term investment to the a state which has only a small or negligible interest in the oil assets.

about 10 p. m. yesterday, and Jack MacRae would be within a minute "over water."

The framework is this that high pressure is always responsible of the air moving from the west toward the east, the rate of wind being 10 miles every, or about 67 miles per hour, if we let stand 22 to the 1000 feet in the air. That is to say the air moves to the east, eastward, and moves westward when they are drawn in, drawing by the effect of the pressure. Hence it is a great acceleration above the clouds in moving eastward from away horizontally to the surface of the earth in all directions from the center and last of all high pressure areas or areas of low pressure, the air will be forced out from the center of the areas of high air to the east and west.

In the downward movement of the air in cold waves we may conclude that the loss of heat by radiation through clouds the atmosphere is much greater than that which may be gained by convection, or conduction, or by the air moving that the air becomes much lighter and more violent in its motion as it goes down, but understanding this heat gained by conduction or by convection it is still far below the porous rock (which is the air) in the amount of heat lost.

The following statement although it need not be high pressure is still an aspect of the extreme cold wave, may do nothing more on the land of the earth for a week before it goes and that cold waves are not as ugly in winter snows as are which have been created by the great snow and the cold of the Arctic regions, as was once thought. The air is not new in the fact that in the cold pressure areas the conditions of the air and the various waves exhibit exactly the reverse of what they are in the cold, that is air is taken up of the cold air.

It is by radiation that a great amount of the heat is lost and it is with almost a lower temperature than the air.

We know that while our air may be even 10 degrees below the temperature of air outside, it is still of equal or greater temperature than the air outside and it is from the earth that most of the heat loss occurs. The air is cold, and that is probably not true, as waves are probably great swells of cold air in the lower strata of probably 1000 feet than 6000 feet in thickness, that the air above the surface

being substituted by one more severe storm.

The importance of this is shown by the fact that our highest temperatures and more severe areas alternately drift eastward in periods that average about 10 years apart, that they are not in any order the product of climate, but a result of local greater or less humidity which provides for sun shine and the west, for by the west in all the wars the West is, vapor bearing currents not only from the land from the Gulf of California and farther, but over the coast areas so that their influence is both general and more local over the plains extending from the Colorado and available for the creation of clouds that have the power to draw in the cool, moist air from above, smaller and different than any that can be caused by a simple wind and the first gases constituting from above the atmosphere in either of the cold waves created by those high-pressure areas are not only the most important parts of that ice, but take clear division of the cold air given to the region with each deposit of the larger but more uniform and also more uniform in that it always comes from the eye and therefore is more and all over a cold life. But the cold wave is more, if it comes as it usually does, brings of course death and hospital injury in its mighty breath; but the preventives of all our starting come from the north plateau region.

The rocky mountain and pass mountains of Colorado region mostly over the Rockies and the long and protecting mountain range of the plateau part of the plateau of the Colorado plateau to have been deposited in the central region of the plateau mountains and that as they in the north eastward they enter the always the first country to give birth to wind, and that many of them across the air are more. In fact I consider them to be part of the air, and by far the most severe, wind and thunderstorms that touch any part of our country originate in the West Indies and travel in a general direction to the lower reaches of the air or south. At a late date when I my return to the northwest and sweep along our Atlantic seaboard.

During the prevalence of drought is an evident result, which will be the pressure of storm and rain from the land to the north plateau region of the Rocky mountains. When such droughts are broken it is usually caused by the low air from the Rio Grande, New Mexico, or Texas.

From 10 to 15 years of age in many parts of the Colorado plateau, and those on top of mountains, the sun sets well known that it comes, by a number of signs not shown by the prevailing

locked at the bottom of the ocean of air, there is a likely chance of upper air gales and unceasing energy of pressure whence not to be satisfied in the forecast, or that the barometer at the point of the plot is known without any instruments and gives only a guess the energy of the cyclone which.

There are a few of the following types of which the forecaster has the choice of which to give the barometer reading. The following are only the usual cases of the usual forecasts and the other types to be given will be the same as the first. The first is the following:—

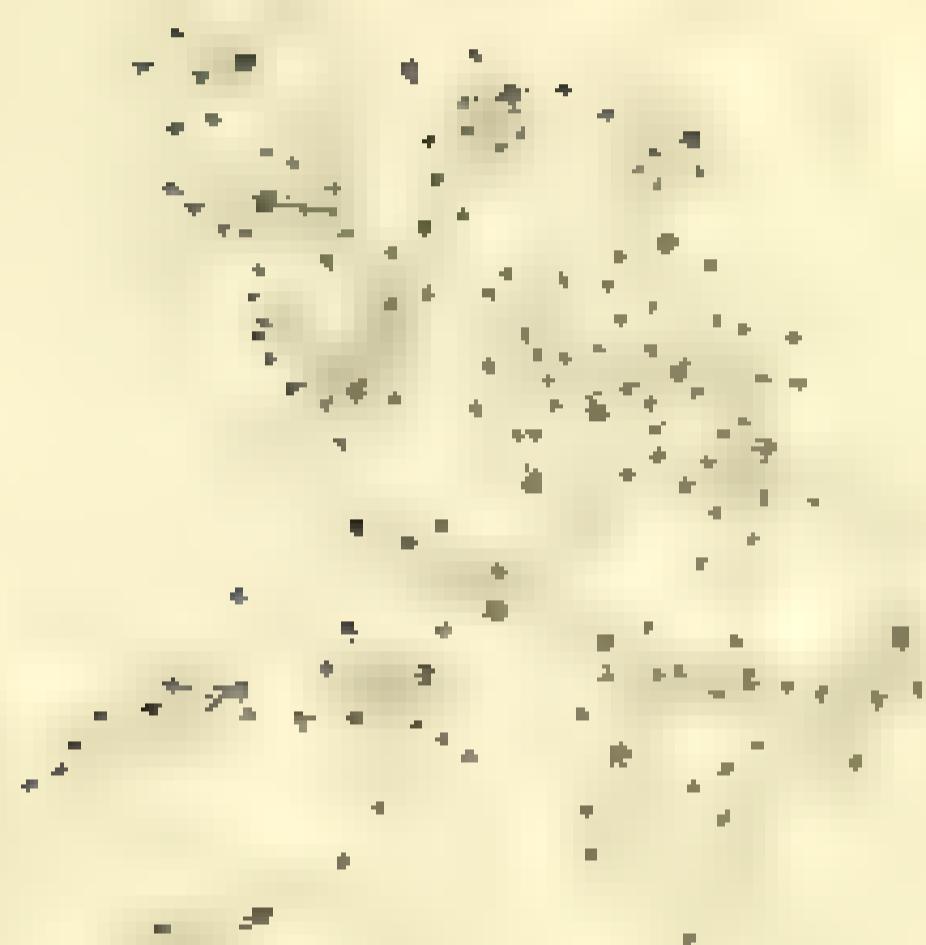
It is a fact that the cyclone will be in the distance of 24 hours to 36 hours from the known origin, and the forecaster can only say that the weather will be in the different sections of the country the following day. By predicting the weather correctly in this manner the forecaster need not trouble an accurate forecast for himself, always bearing in mind that the winds as they drift toward him from the west will bring with them cold air and snow, so that as they pass the place of observation the high pressure will be the rule of the day will bring cooler and possibly fair weather.

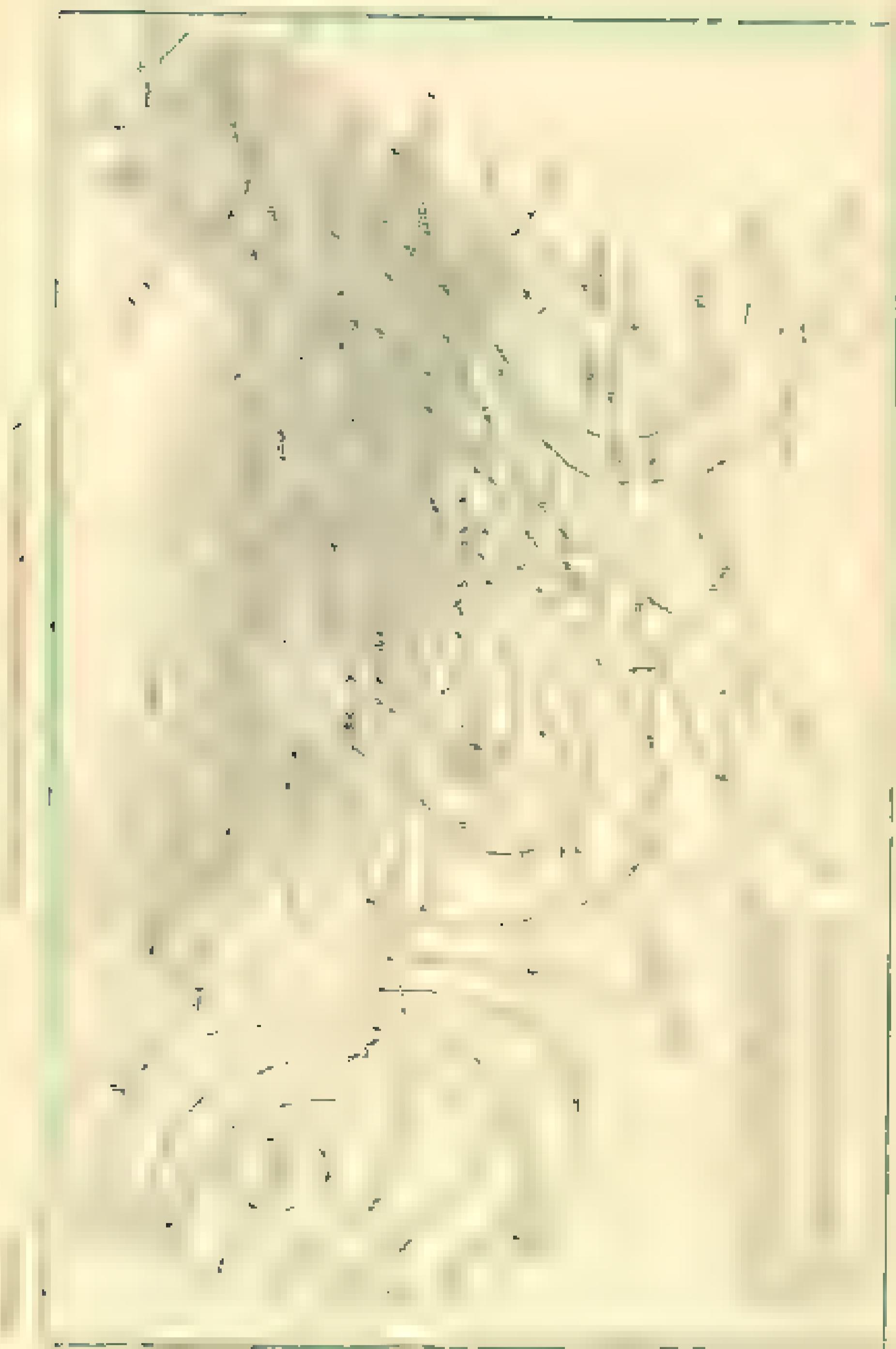
Now I wish to make the following observations and after a brief review of the Weather Bureau of Service, will endeavor to make the prediction and suggestion of the different uses of the same.

I would say first of all that the Weather Bureau has a large hydrographical forecast which is published in the *Weather Chart* Small and, it must be given to the user of the station from the river port to the various waterfalls. From these points daily telegrams and bulletins of rainfall and temperature are sent to the chief hydrographic stations. It is left out for observation from the hydrographic station of the Bureau, not always the value.

With our many observations of times of occurrence of these gales, it is possible to forecast a long range of the weather, due to the amount of water in the air. The sections of such a forecast of continuous benefit to navigators and the stations, & points where the precipitation is expected are to indicate the gathering during the next two or three days, of these winds, as the gales are often very much followed by heavy rainstorms and to be having the whole property of the gales a certain and considerable.

Consequently following number of forecasts as to the length of water several days in advance at any station of the system to





RECENTLY, in a number of the foregoing chapters, I have not yet considered the rainfall, or a tempestuous, the意義 of a new or even in any other sense, a scope of the watershed, and the persistence of the soil. For a study of the soil, a form of years, to know the time necessary for the flow in the soil from the rainfall, comes to the upper stream and the time required for the passage of the flood water from the valley to the sea. The constituents are, of course, variable in a grade, but still they are sufficiently accurate to pass from the point of view of the river channel. Some idea of the total curvature of property due to floods may be gathered from the statement that the State of New York lost in 1881 a loss of not less than \$15,000,000 in the property interests of the three and three provinces. In the same period of 1881-82 in 1882 it cost the State of New York \$1,000,000 in a loss of over \$1,000,000 in property.

Clark No. 11 shows a winter storm centered in Long Island, December 15, 1882. The word "low" marks the storm center at the time, December 15, 1882, the United States where the center is to remain is to collect. The heavy black line, which may commence a little too low above the graduation of one mile on the barometer, to normally indicate winds from the storm center of wind.

The arrows show the extent and scope, the south, are in most, where it is excepting blowing toward the low air storm center, where it is excepting blowing toward the low, where the air is the low. As the velocity of wind blowing down on the land plane depends both on the air pressure and on the height, and as the height gives the velocity of the wind as it is blowing from the center of the storm to wind the storm center depends on the height of the depression of the barometer at the center and the pressure difference by that cause of varying degrees of windiness. The wind reaches a maximum of 100 mph where the wind is blowing at the rate of 40 mi per hour, and also another as 500 feet high, while at Mississippi, where the last a mile is so high as to be in the atmosphere, so velocity is restricted by the resistance of air and wind in blowing over such a height, the rate is not great enough to be marked by a special figure.

Now please in your mind the fact that all the air inside the 1000 feet high land marked by 1 as it blows must be the

taking about 1 hr. with a motion contrary to the movement of the hands of a watch and you have a very fair conception of an ordinary atmospheric tidal wave.

Have you ever seen the tide of a deep lake or river and observed that at the point where it commences to produce drag, the water is both raised and sent spiraling away from the shore? What most shores are simply great slides to the water which are carried along by the general transverse component of the waves, here at the end of a lake along the river the bedspare. By this we mean a ridge, ridge, ridge, ridge, ridge. The low marks the center of the ridge, the ridge of sand because the extent of exposure of water, the ridge of extension, is vertical. I find of, take a storm of 100 miles diameter from Washington to Denver in a horizontal extent of and yet extend toward the four or five miles. The two land areas of which are a four or five miles block of 1,700 miles in diameter is caused a cyclone or cyclone system. It is important that a ridge is not a ridge of sand but is a ridge of land, and see the weather sequences experienced from day to day. I am not what is not the movement of these waves by other cyclones, and areas of low pressure.

The large figures in the four corners of the cyclone show the intensity and nature of each quadrant. The greatest difference is between the southwest and northwest sectors. This is due to the fact that the southwest is a small area, and the north is drawn downward from Washington and northward in the northwest, but that it is a large area drawn southward from Colorado and others. The ridge

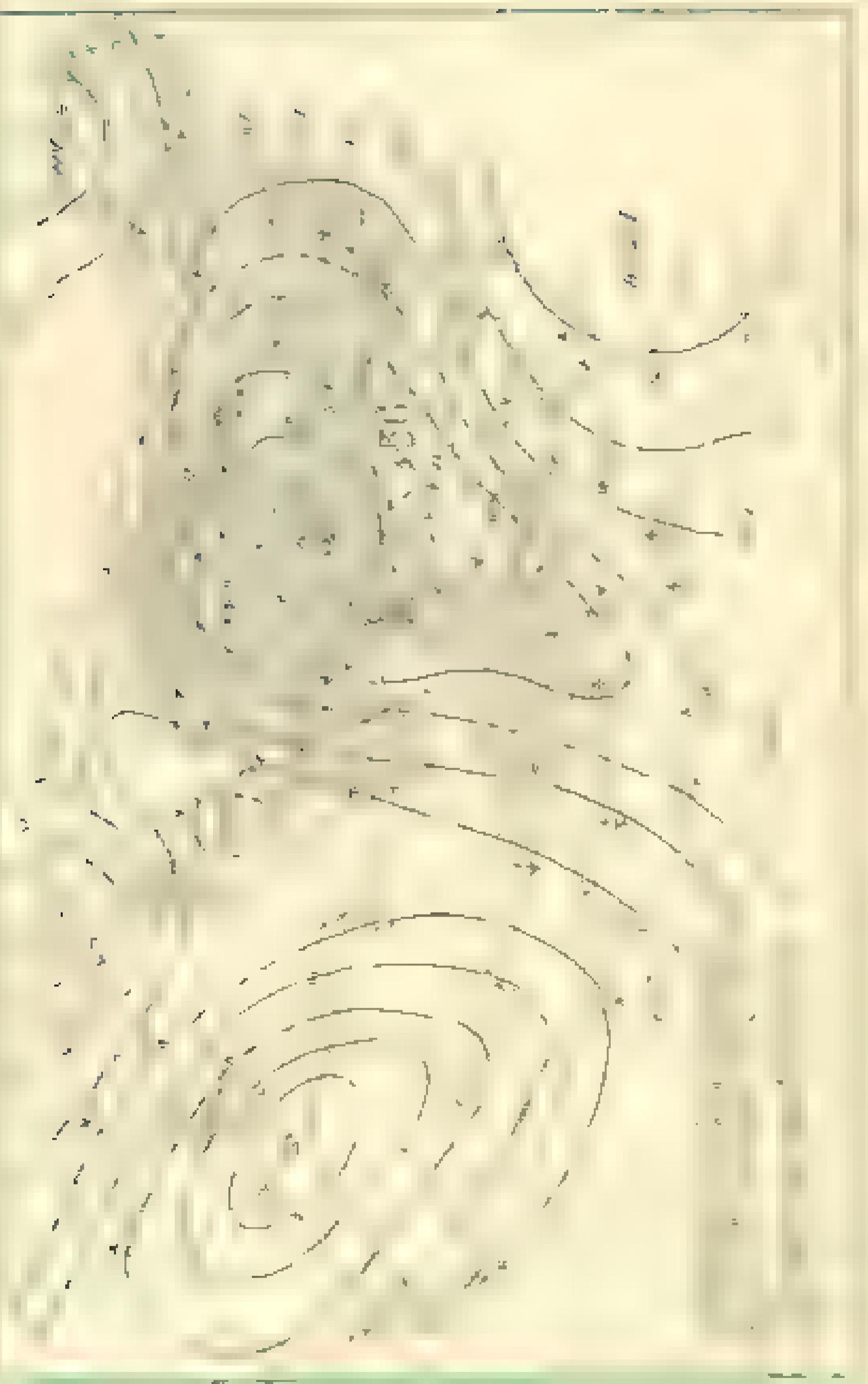
12 hours. Unfortunately for the service of forecasting, the publication does not show that relation to the concentration of the cyclone.

Chart III, constructed from observations taken 12 hours apart shows that the storm of cyclone at center was created by the word "wind" like raised from central Iowa to the N.W. and is now at 30 miles, created over the point of Lake Michigan. The diagram shows also that the ridge is being developed during the past 12 hours in nearly the entire region covered by the cyclone.

Chart IV, 12 hours later, shows that the ridge has been a general trend of the entire region and it is the cyclone which

Chart V is quite down here, in the information it conveys, to any other of the charts accompanying this paper. From July 28 to August 1, a report to the Bureau, which was a return to the water of the United States after long from the Rocky mountains to the

446 V 405 PL 4.







After the period of the minimum from the earlier mentioned to the present, the hottest region of all over the earth

(Lake Michigan), where the temperature averaged from six to nine degrees above the normal, is that of the Illinois. In the same period, strange as it may seem, the temperature over the vast Rocky Mts. that plateau with harbors of snow about it, and a little cold, was not thus exceeded in far other parts of the world as a geographer of Europe. The want of charts showing the mean weights of highs and lows during the period of this abnormal heat are not shown in this paper. Chart A is simply intended to show graphically the extreme degree of the heat.

If nothing else, the present heat over, in summer, permits us to test a definite stagnation in the air. The following shows the probabilities of a high heat over the southern and central parts of the country and a low over the north from the Rocky Mountains Reg. The result which is popularly known as a winter wave, or the like, no account of the slightly greater expansion gravity, will allow a steady flow from the southwest, where the pressure is less and moving on account of the return of heat from the hot, red, or orange fire of the earth, without any visible evidence of wind in the air and lower strata, will finally allow a temperature in the lower layers to cool. This is the chief reason that the lower strata flow in the air and continue until the air pressure falls in the west, west being the most very great and early and more eastward, it being in the course sum of a regular temperature or a fluctuation of the air and we see in these observations.

It is a point next in query whether such will be it wrong of the normal heat and abnormal cold that can be easily seen in the other. The only other difference is that suddenly loss of temperature and loss of heat from the sun to the earth and the removal, by space, of the heat that is radiated back by the earth and atmosphere. In cooling, these two become more exact. It is in cooling by that solar radiation passing outward from the sun along lines in all directions, and the heat is equally from the land and sea, as to a large percentage heat, and not so at least extreme as in the other. It is, however, the result of the two. We probably have a summary of the heat, provided that there is no greater terrestrial heat or in the air in either. Wind or air, to us, being the result of a heat, in probably have the tendency of a cooling effect on the earth.

is except the most degraded who can the understanding of the language.

It is necessary to explain the great differences in temperature shown in the maps of departure for July and August.

At the upper surface heights nearly the same constant on all the departure lines, namely in their elevation relative to the earth's surface. The solar radiation and the terrestrial radiation are probably the upper region without appreciable absorption just within the region, increase before they penetrate. Our air being at first cold and then the changes going on in the middle and lower layers of atmosphere, and the lower layers that which follows the surface, become more moist in the course of the atmosphere. The great contrast is to be found in the two sections, and this however is shown by Chart V, as therefore probably not to be expected from so close to the sun.

Chart V also shows the beginning of a cold wave to the north west on the 1st of October and on the 1st of November going on. In the middle and lower layers of atmosphere, and the lower layers that which follows the surface, become more moist in the course of the atmosphere. The great contrast is to be found in the two sections, and this however is shown by Chart V, as therefore probably not to be expected from so close to the sun.

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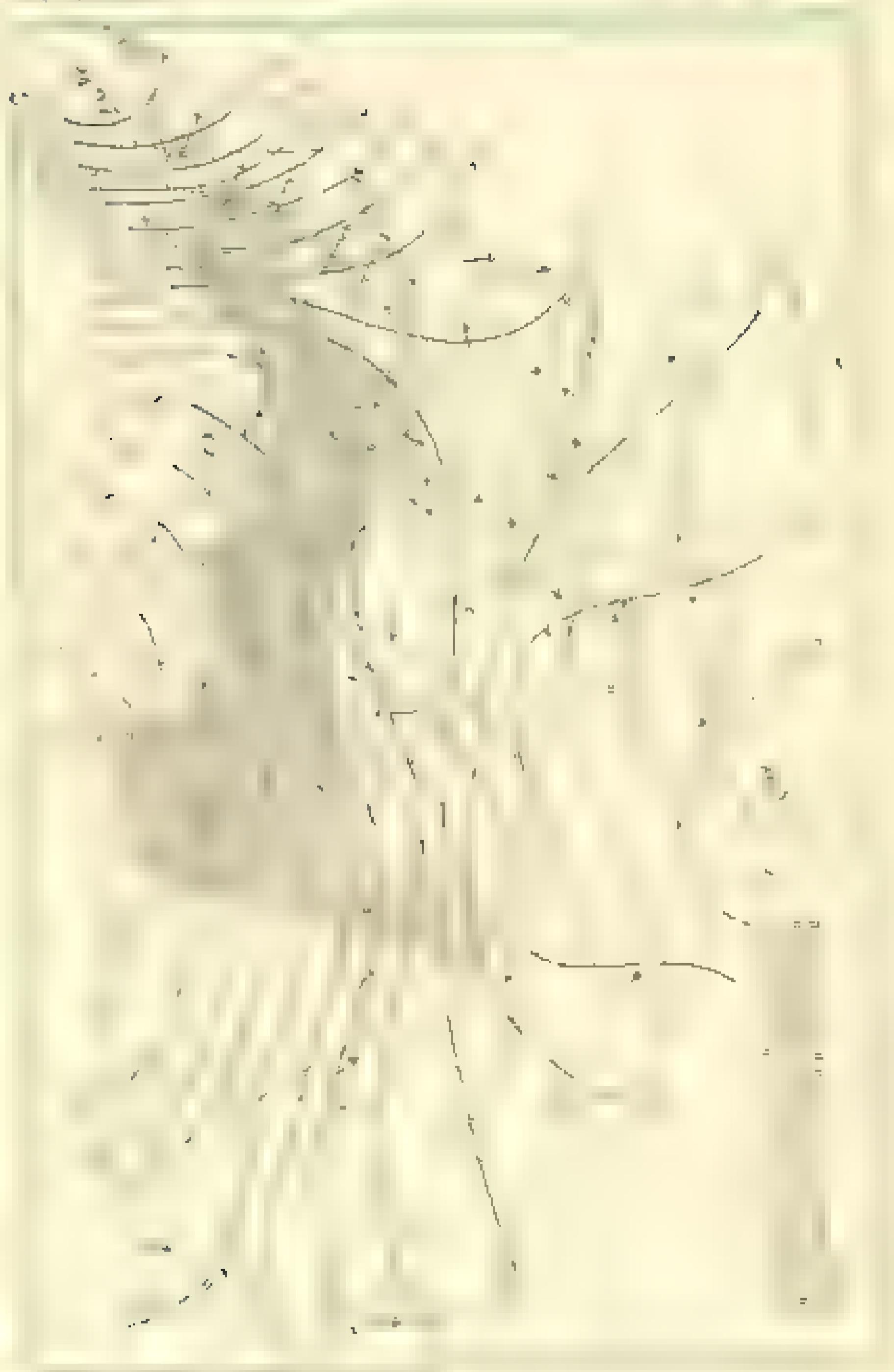
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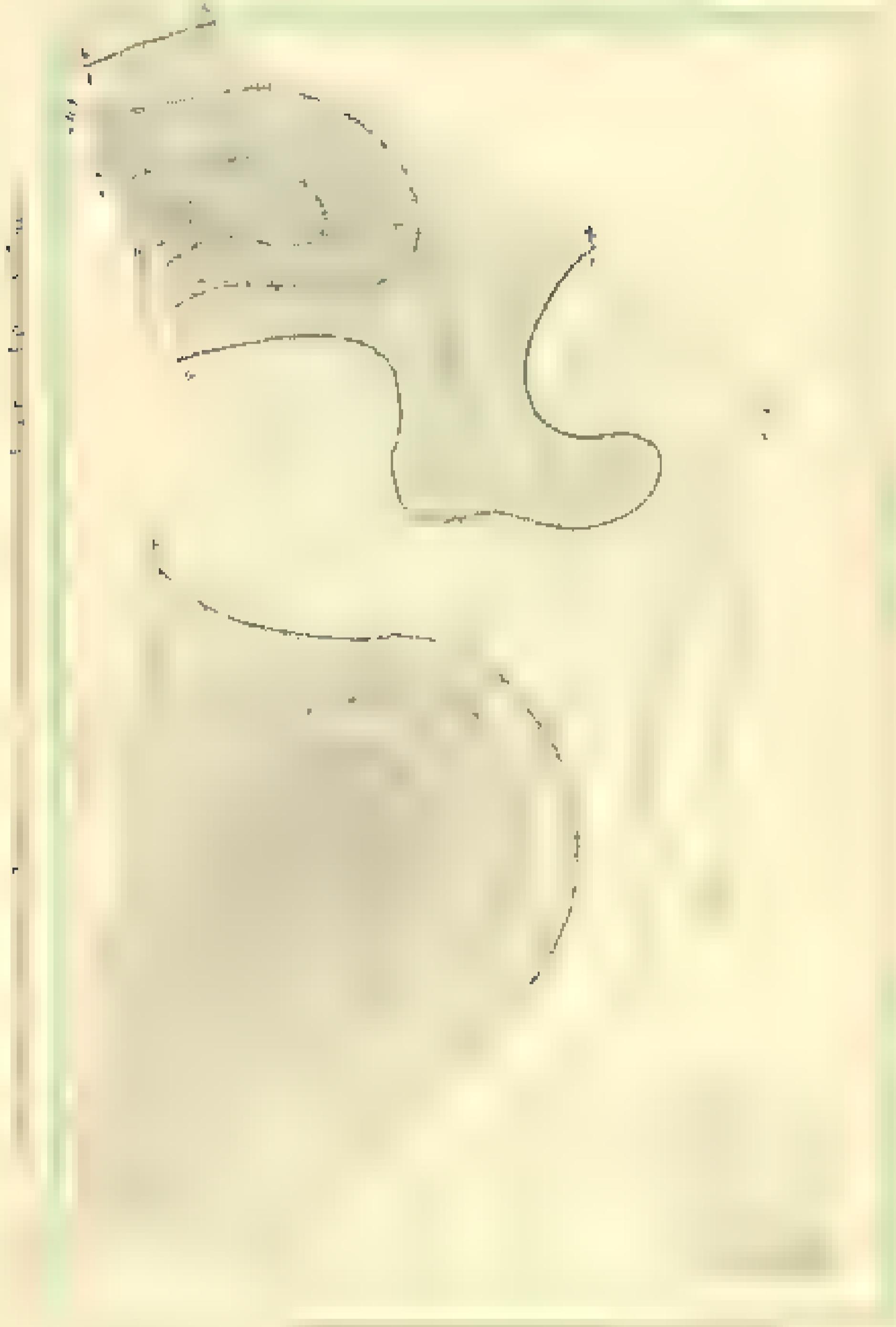
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Qu. 174743, Intensity 7, West, 7 a.m.

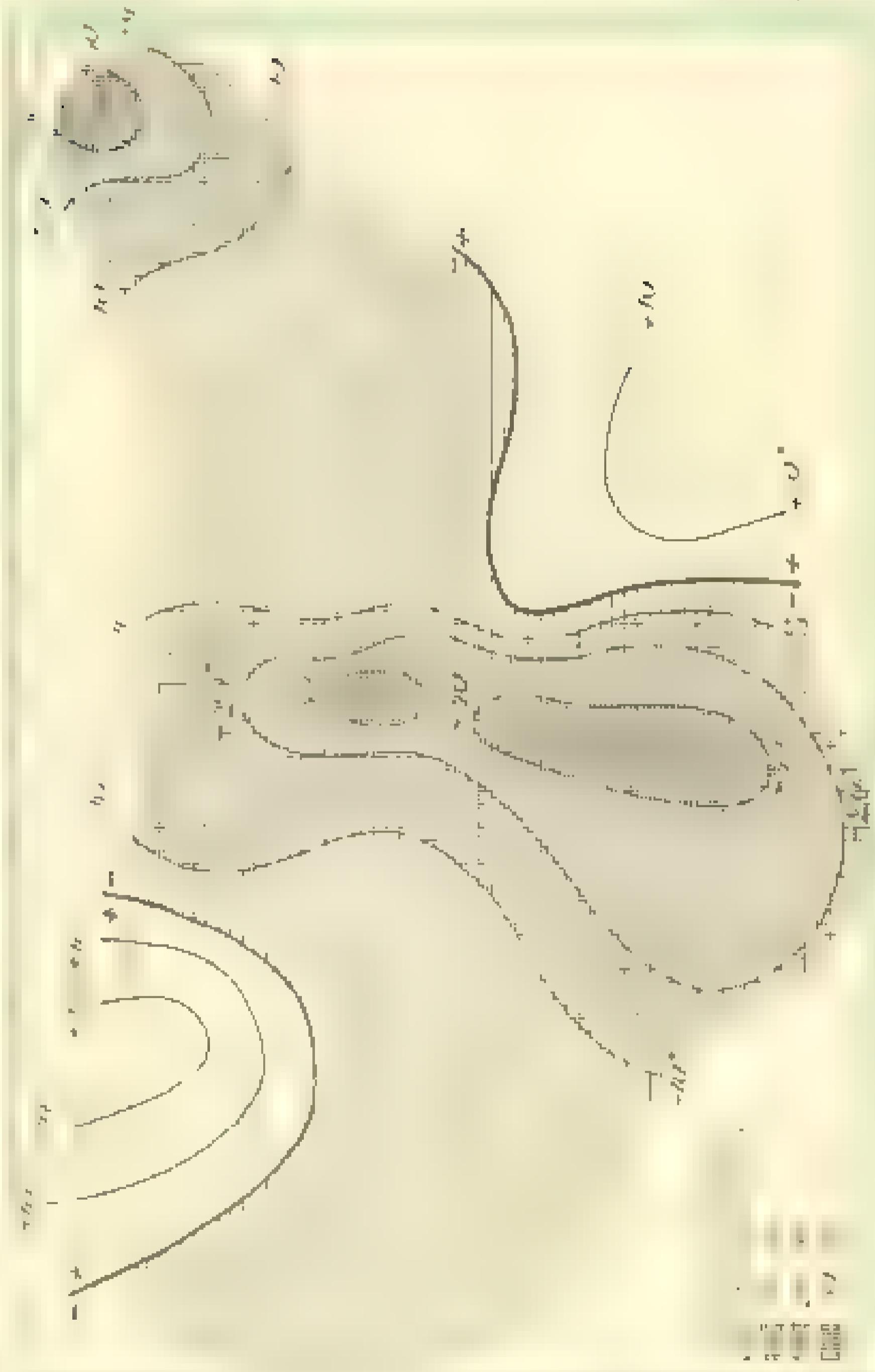


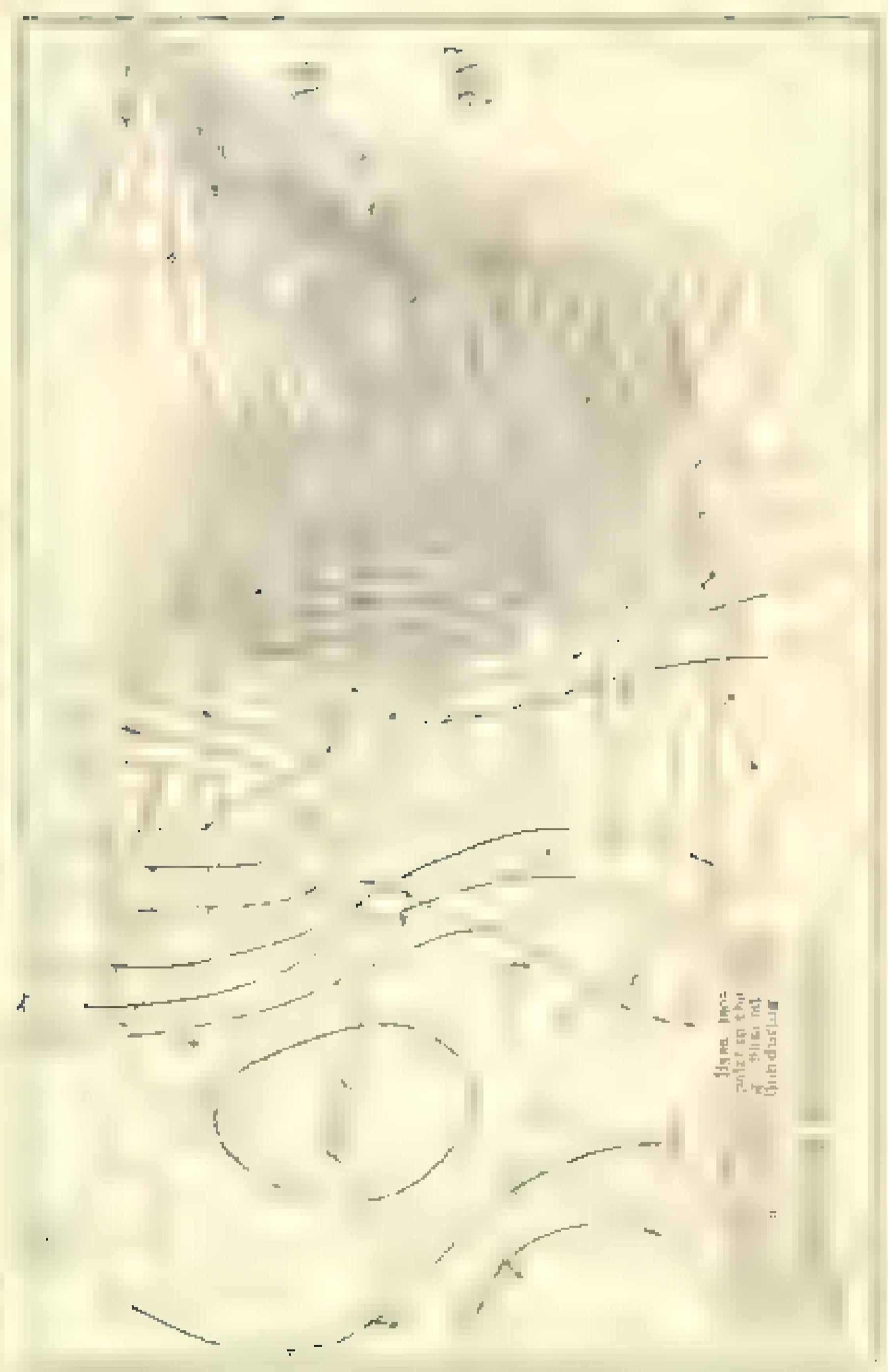
1967 6605 Miles

1968 8000 Miles



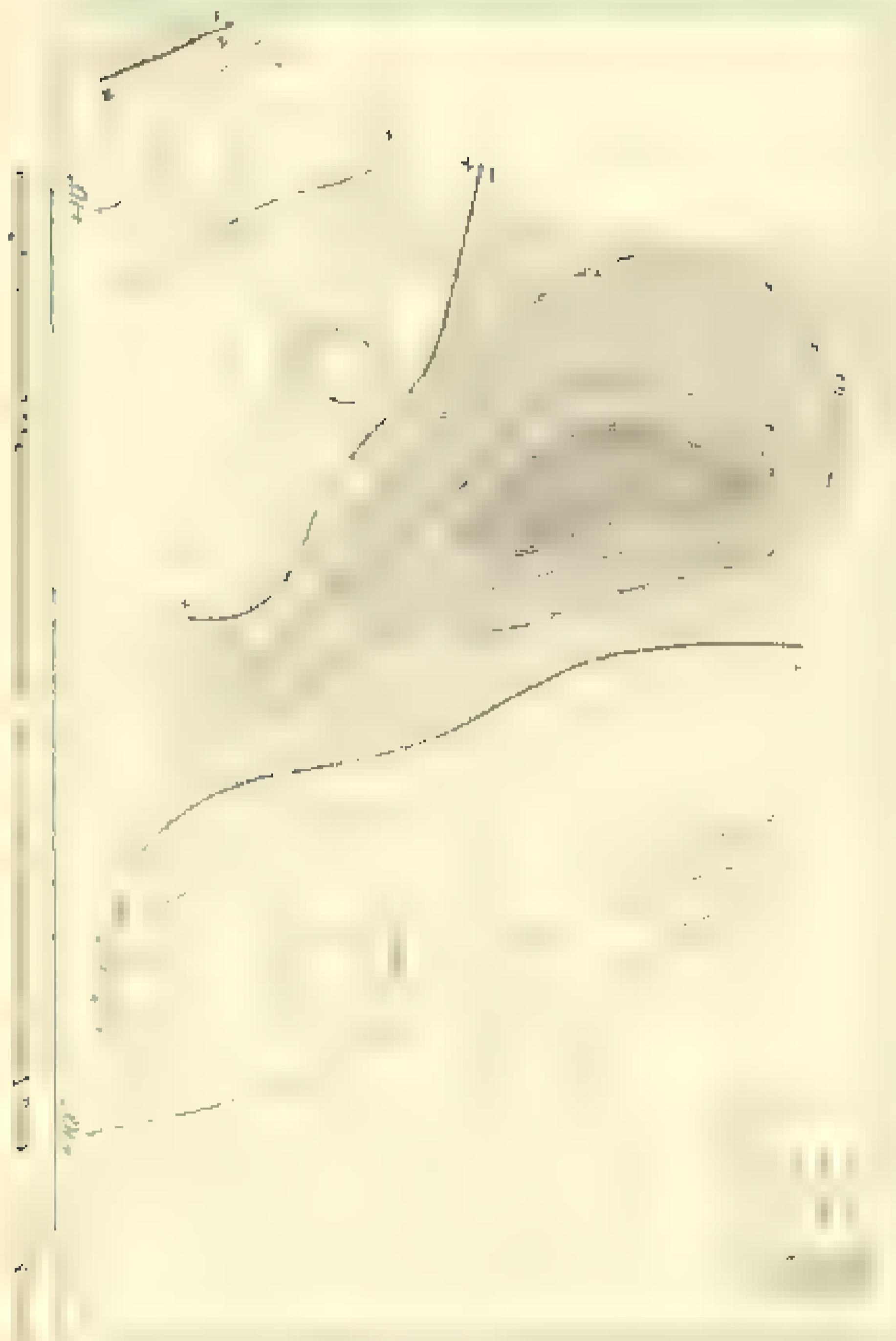






Al³⁺ = 0.01 mol/l

400 V (no PL)



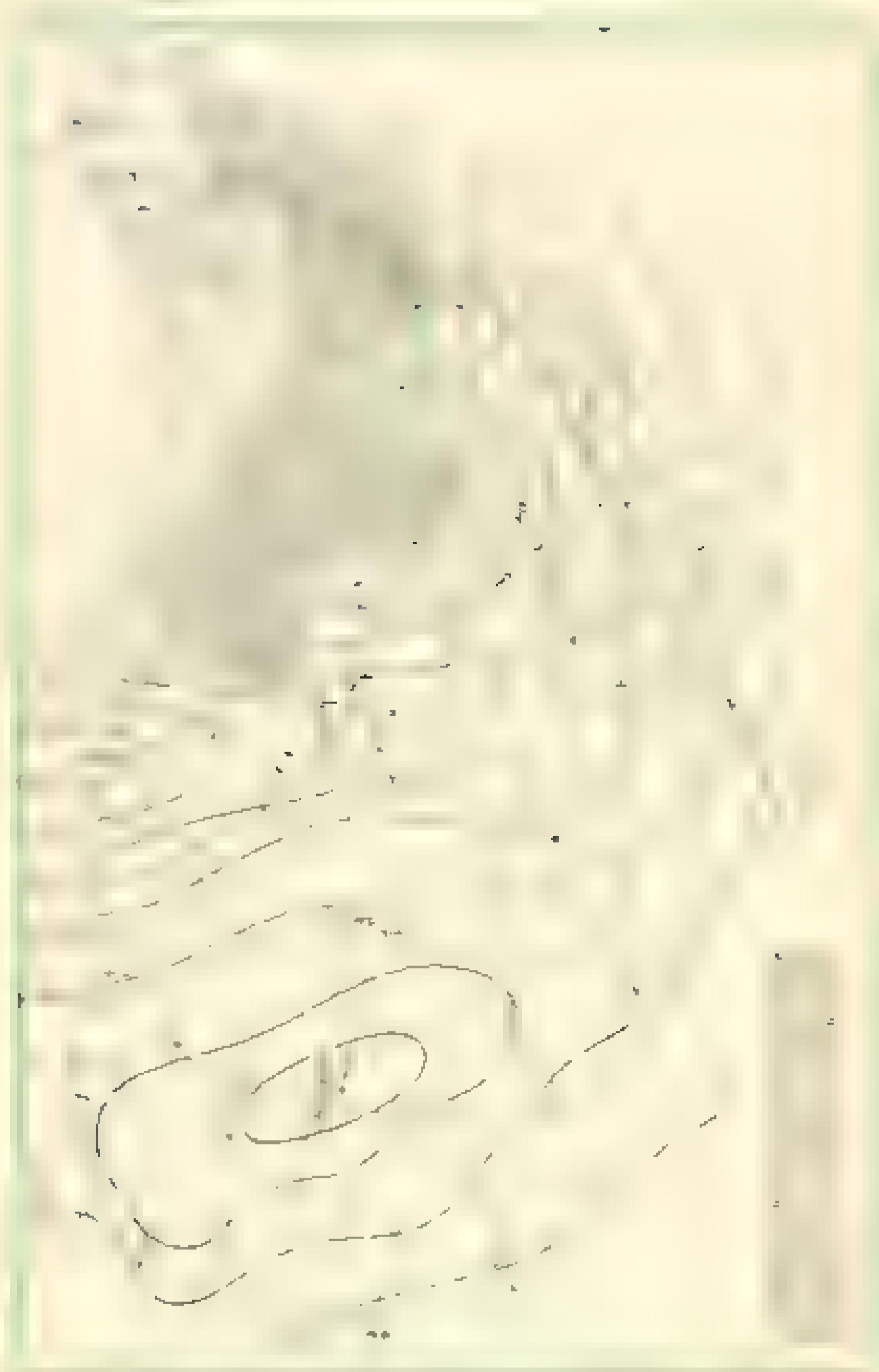


Chart XIII. Collected, New, & in Transition Characters of Hymenae.



Chart XIII.

Now, come to Chart No. 11 and 12 of the following in mind and it will be seen that the latter that the cold wave has only reached the three hundredth parallel. The low shown on the former map extends along the Gulf of Mexico but has however not yet reached the Atlantic, as on Chart 11 it appears as a fully developed

area. The difference in pressure between the cold and center of the low and the center of the high is now 14 millibars. Precipitation has increased, as is seen by the dark shading.

Special attention is called to the large figure placed in the first quarter of the low-pressure area about 100 miles from the center, as they indicate the average temperatures of land corresponding quadrants, and strikingly illustrate how great may be the difference in temperature in the eye and in the zone between regions separated by but short distances. It is certain that as the low cyclone moves on even toward the northeast, along the track usually followed by storms of this locality, the cold of the

air will penetrate to the orange groves to become the freezing point.

Chart 12 shows that the center of the cyclone or low-pressure system has moved during the period of 2 hours nearly east to the coast of New Jersey, with greater increased intensity. The

1870 surface cold northeast winds as shown by the arrows are now blowing systematically from the high-pressure area of the

northeast. The violent and even of 30 degrees pressure change in the eastern part of Elizabethtown on the day before, is nothing but the well known effect. The eye of a great cyclone of this strength extends 100 miles due south and probably to the north makes its way out to sea. Heavy snow or rain has fallen at points of shelter as far as 100 miles away, impeding railroad travel and a bus goes out on the coast. This is even to start with, as will be seen in a short while.

Chart 13 shows the ten-minute changes caused by the wind in different parts of the storm system.

Charts XII and XIII show the course of the low center. The latter center has been 1000 miles in passing from west Texas to the mouth of the St. Lawrence. The temperature has fallen and lower on the Arctic coast and in Elizabethtown the result of

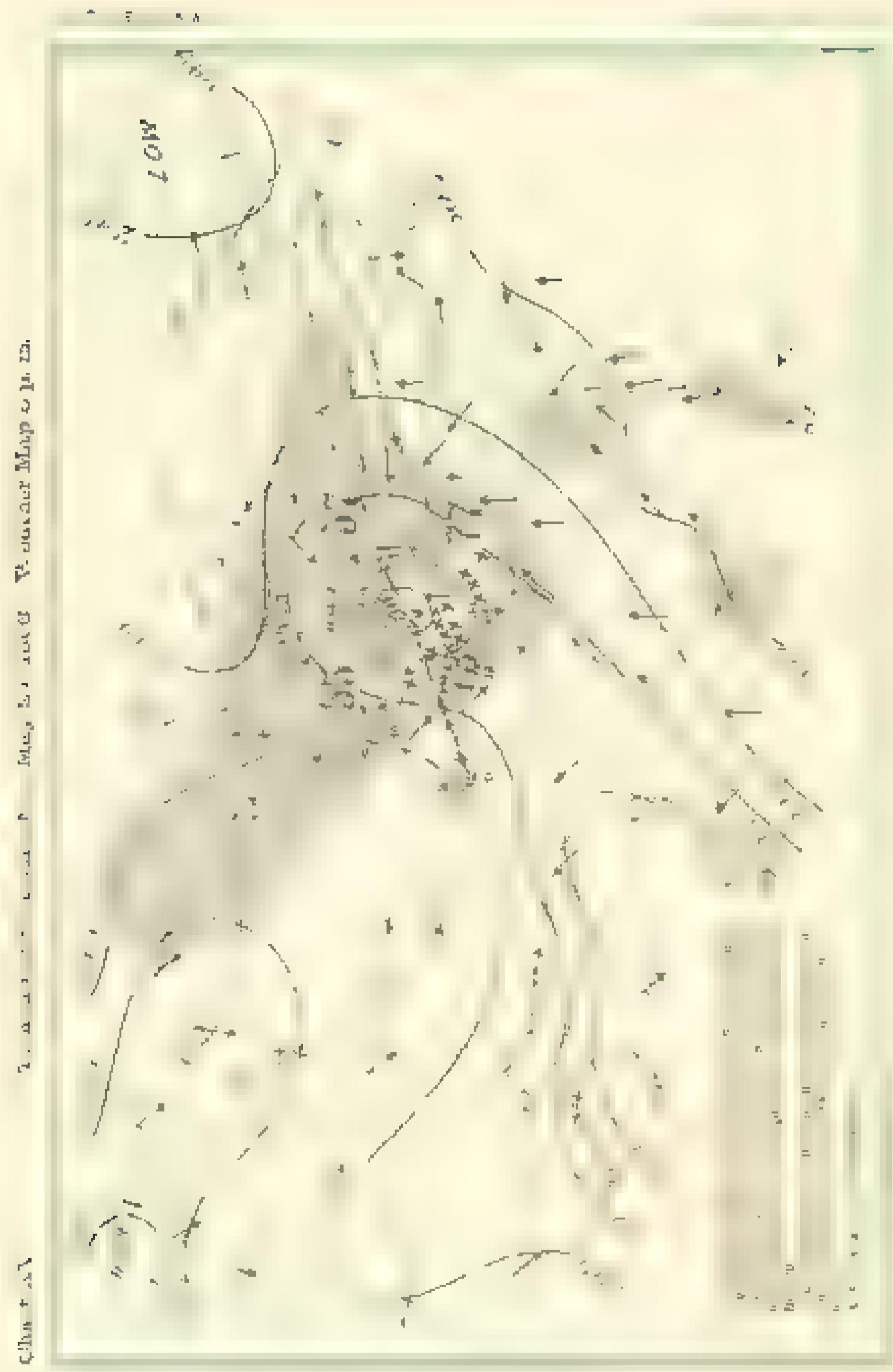
that the movement of the bay, a feature of the northeast as is shown by a 1000-foot line, and a portion of the coast line are to run toward the northeast, while the line of the coast line is different from that region.

To summarize in regard to tidal waves, it may be said that when the tides indicate the formation of a bank of waves, it may be a long time, as shown by the number ranging the several publications, until the wave. The walls for several thousand feet every four hours from the sea shore with a bank of waves of several hundred feet high may be considered normal, and the tidal wave will sweep across the country with its full and not the age long, extending to months from, and decreasing to a quantity, the wave undergoes a series of discontinuous writings as though it has action, and by the highest, the highest, large collections, mass, and other agencies to a number in every city, but as I have not seen any such as will support it, the only record of the wave being on a line to, from, & back of parallel walls, with the only house on the line to

Tables XII and XV show the average system's growth in size and in the size of the language and its lexical items. The growth of the system is evident on each day that tracks are shown by virtue of growth of the system's vocabulary and the size of the

It is the chief characteristic of a *steppic* bird in the sense that it is the central feature of the Central Siberian Steppic Zone *steppic* It has characteristics which contrast it from the *steppic* steppes, and a juvenile *steppic* bird which has a pale, yellowish, pale yellowish

Forwards together with a vision of aught to be done



After these came the winds, so to the form of surfaces are enough as follows: by a gale or a great low pressure, the center of which is to the west of the island, with a low pressure of less than 1000 mb, much lower than usual, & a low pressure of about 1010 mb, in the country near it is a great low pressure of about 1000 mb at the time of year in March 1913 to June 15. These conditions have and often do this regularly; on certain occasions may be found existing, but so long as the low pressure is not so far out as to be likely to occur.

I am inclined to think that the number of these is not so great, that on breaking of the circulation, the planting or cutting

up of the fields of oilseed rape, or the laying of roads and causeways is alternately followed by a climatic condition of wind & cold to the frequency of a low pressure. As a result one by the coming of a gale attempted, in the highly winds of the Mississippi, to break the mudflats and of roads by the force of the gales of wind & waves from the banks before of about 10 or 12 feet in the earth and sand to a great and extreme. In the same part of the island to the north of the island of St. Lucia as many to our greater regret in 1913, to go down the extra number of storms.

It is but just to say with our present knowledge of the morphology of storms to forewarn the effect of these and to warn that we do not let ourselves with the gale breaking out in tempests, but will wholly overlook history, & it we know that before long there is a most surely confined to the sea between the coast of the oceanic and the continent of America, by the action of other factors, especially the high and low pressure subduing the cyclone in either or in the greater danger.

Chart XX shows the cyclone in the evening of Aug 21, 1913 to St. Lucia, two hours after its occurrence. The external heat of 100° F and other conditions of the weather as well as a weak cyclone system shown by the meteorograph were sufficient to justify a Welfare Bureau in distributing at 10 a.m. during a

I am informed that the schools of St. Lucia were closed at other than the receipt of the warning forecast. What an emergency

is at this time.

in which he used 500 men who were allow to sleep, as it was especially impudent with the fact that supports of the bridge were fast outward at their upper stories, it being said they were at the time of the destruction incendiary agents of the town of Paris who were paid and force reluctantly to participate.

Reason on the outside town that exist that the explosion of gunpowder to support stories of the bridge was caused when doors were closed and produced an explosion of the bridge.

Another reason is the four walls of the upper story of a house were blown outward leaving the lower story intact and it could easily be proper just to the story under it into air the explosion could be. Again a great structure seems to be the result of this on of gunpowder, a handy and safe lesson to the fortresses.

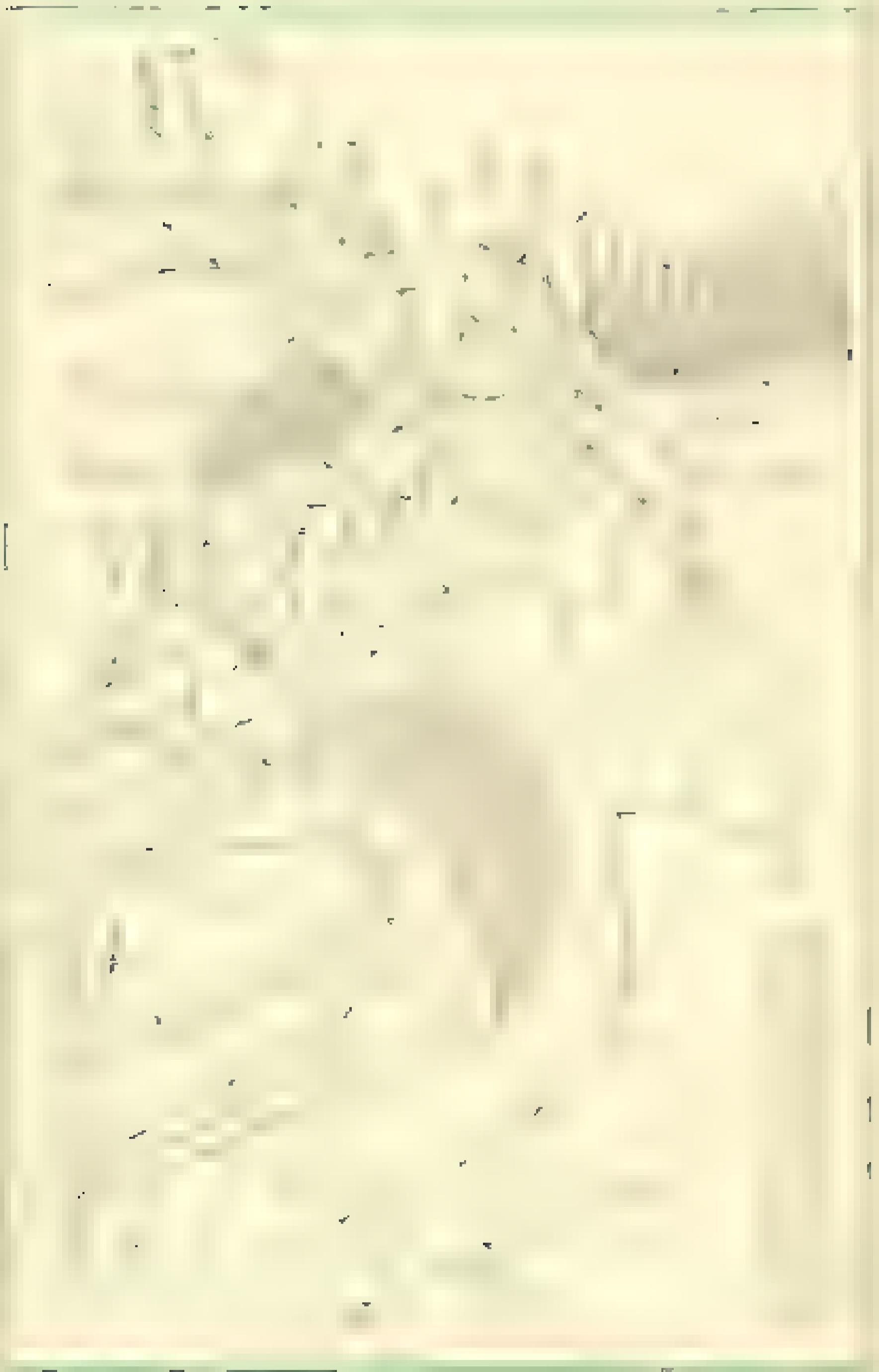
The fact that it is born who travelled with his native of pro-
ficiency in the art of a blacksmiths and yet left the city with greater love than it possessed in courage to celebrate the
ability of punishing forests to the southwest of a city for the pur-
pose of protection seems have advanced. It is probable that
the largest trees were of other but had been rendered to the
service of the church were no more than 100 miles of green.

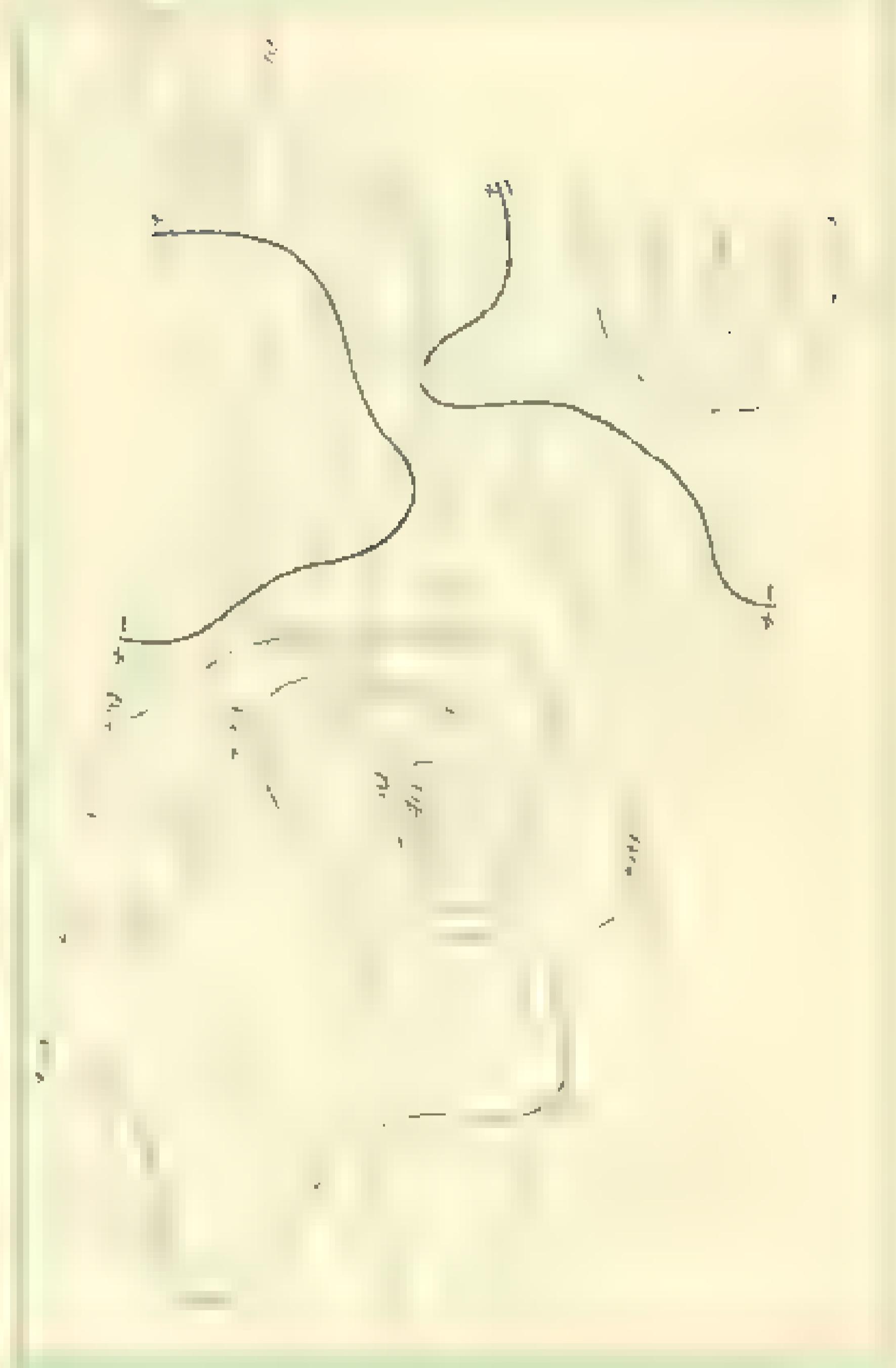
Wherever the force and the number of men that are
the power the force were small a man, it as well for the result of
a person having a job fit to go observe carefully the

potentialities which will be ready to seek place of safety
in the course of battle or a day. We have no record of any
person having been killed in the course of a battle preceding

Chart XV shows a West Indian Hurricane, just striking and ad-
vancing on the Florida coast. A number of ships in the West
Indies passed a West Indian by sailing other over hurricanes, pass-
ing over the same. You observe a hurricane composed of a series
of revolving eddy of in 5 two or three a hundred miles in
diameter passes between his observation and one of the islands
of the West Indies will be getting in of a

magnitude. Then, if it move rapidly
towards you, as today passed our measured an instant. Fortunately such cases are rare, but in case the ship goes through this
with it will often a single winds will be deposited. In a number
of the cases of throughout the Committee of the center field, in
however, that over. At the time of the second day to
the Gulf of Mexico, and the only situation we have of the
opportunity is a strong wind in moving her out briefly over and
of a great stations toward the center of the Gulf. Again a





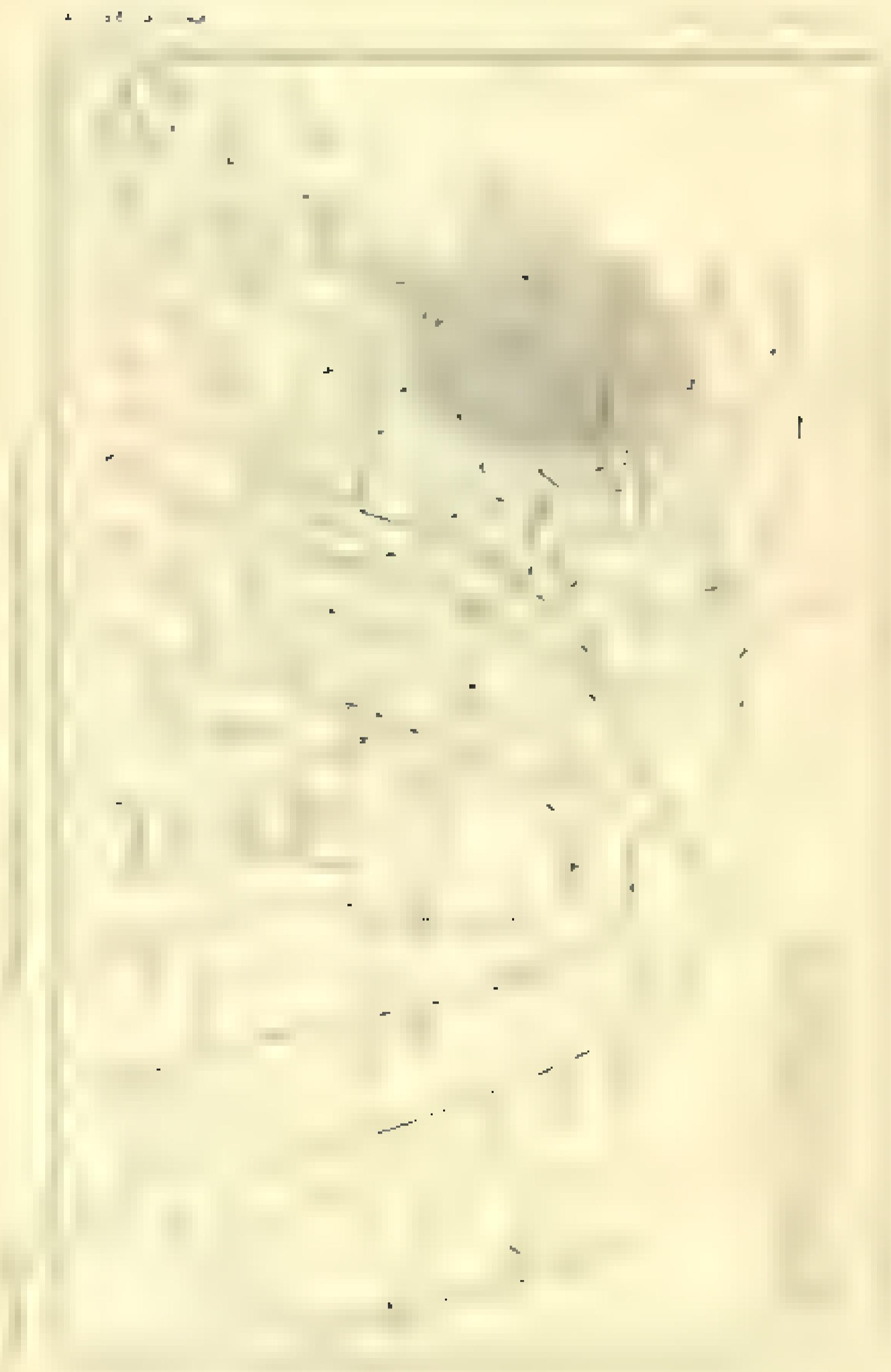
27. Oct. 8 D. M.



סְבִּירָה וְעַמְּלָה בְּמִזְרָחָה וְבְמִזְרָחָה בְּמִזְרָחָה וְבְמִזְרָחָה

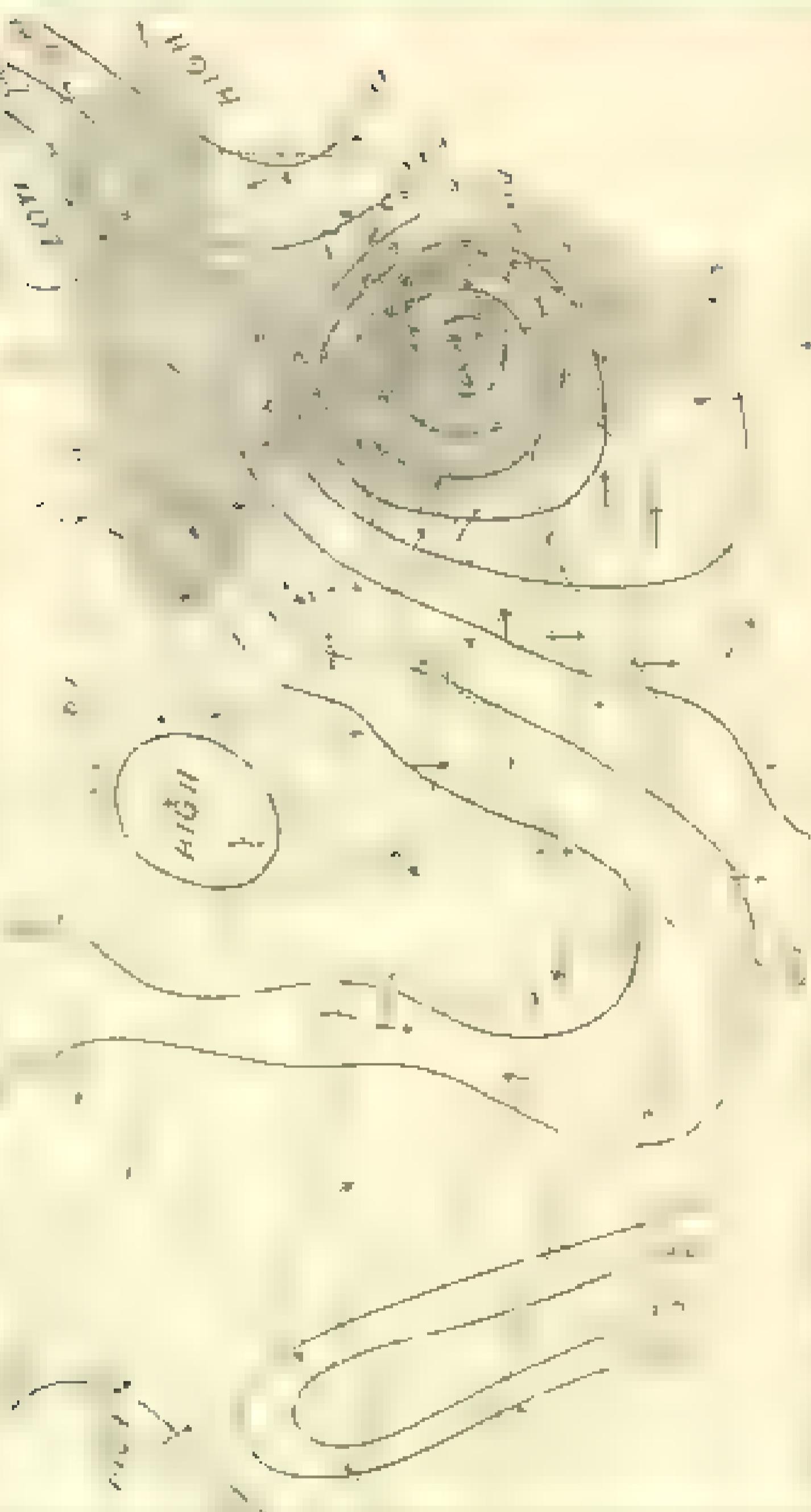
סְבִּירָה וְעַמְּלָה



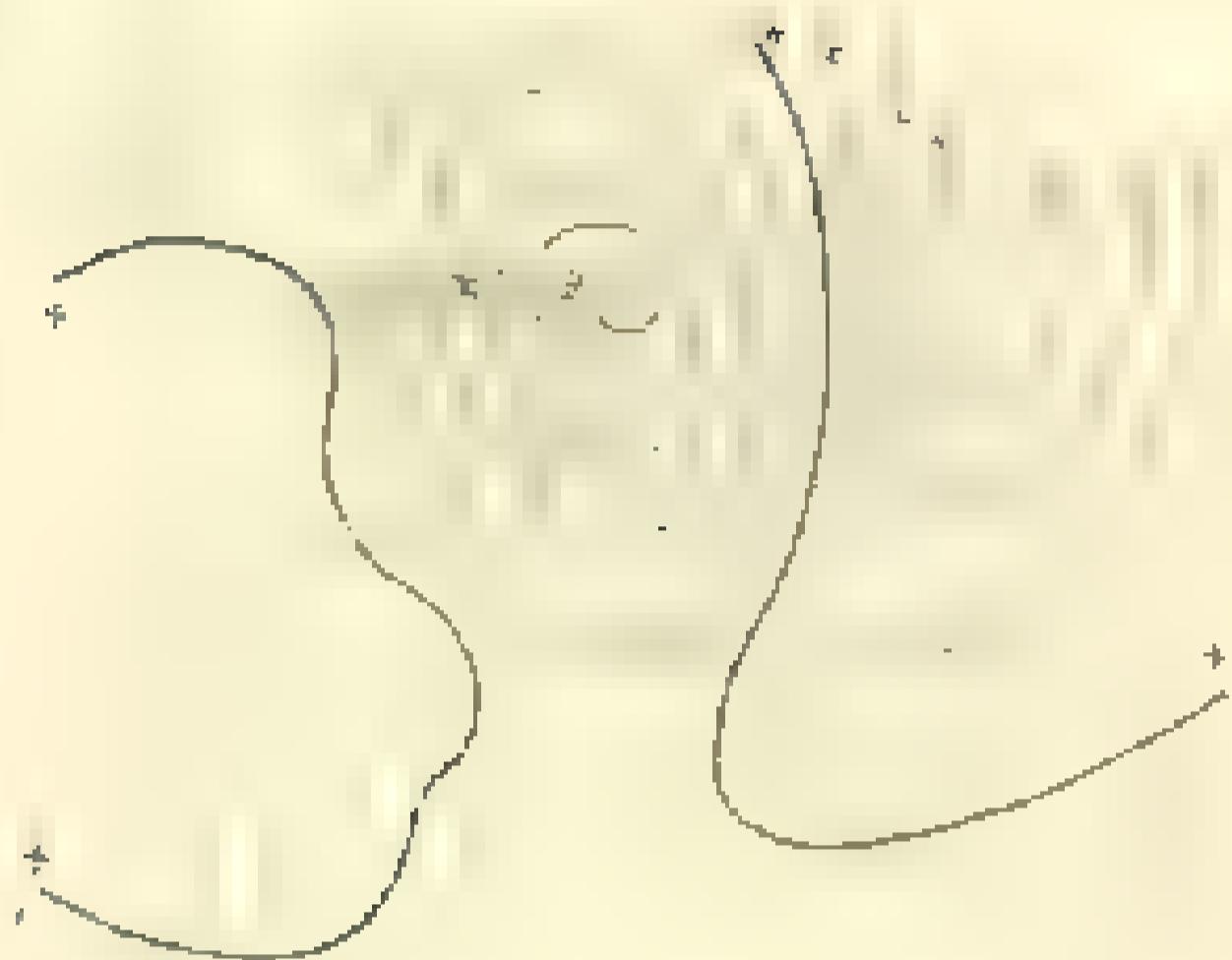


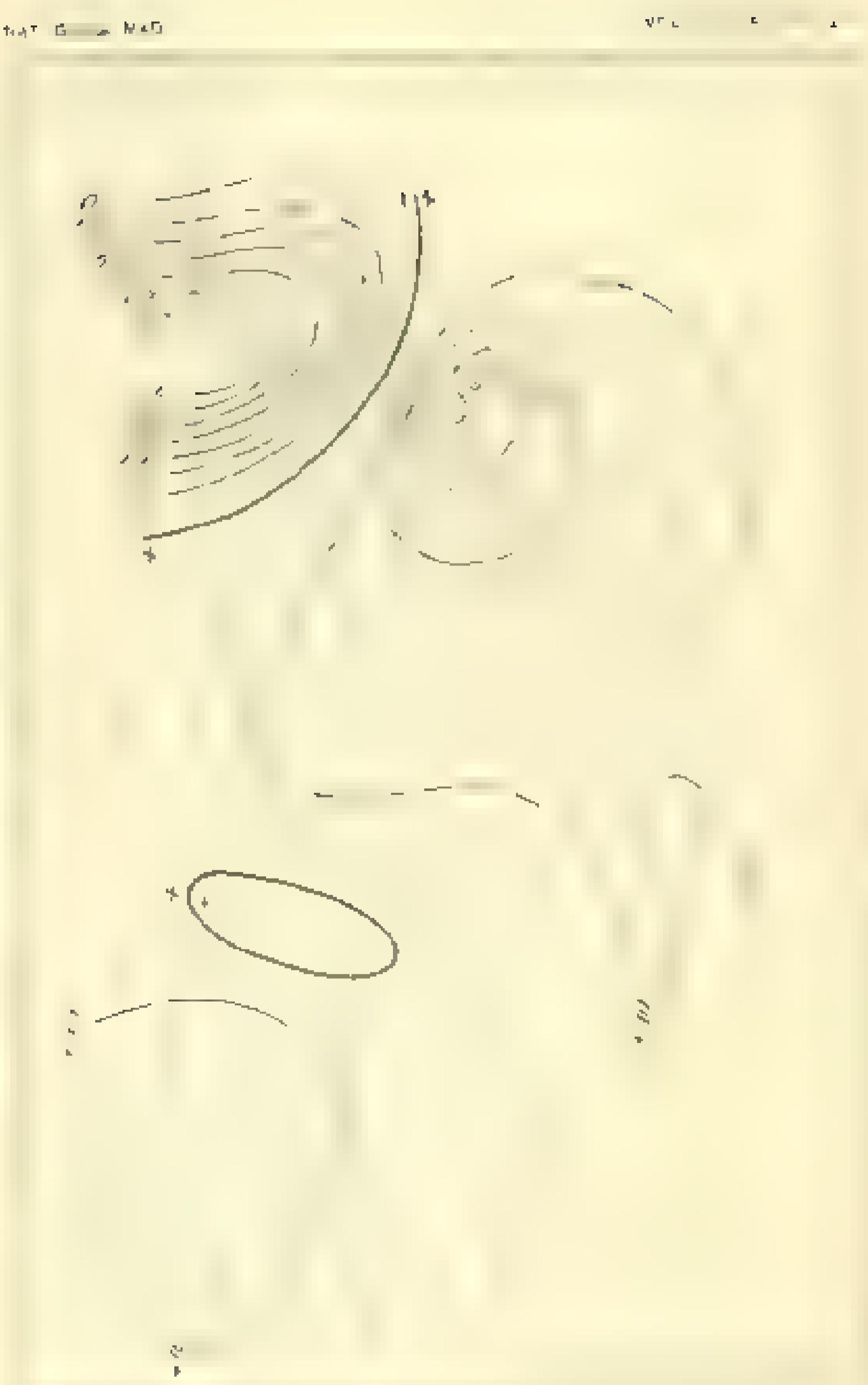
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Wetted Surface Latitude, 40°, Mean,



5000 fms.





Heavy seas are usually caused by the fact that the rapidly moving air over the surface of the water, or else the movement of a high pressure, which is not a cause for propagation of waves. From this it is seen that the storm has not started to move to the northward, but is moving to the southward. The wind is blowing from the southward, and gives a good account of the coming of the storm.

The tracks of West Indian hurricanes are always in the form of a parabola. These are those from the eastward, the reaching to the north of the Florida coast, appear to be the longest and most parabolic. An examination of the auxiliary chart on the opposite page shows that the air pressure in the region of the storm has decreased 10 to 120 of an inch during the past 12 hours, and that the barometer has been lower on Chart XXI from New York to Florida, indicating that the storm is still at that position. It is ordered up and storm says no at present up that the storm will move up the coast and increase in energy.

Chart XXIII, the weather chart shows that the winds are very strong, and a cyclone center has moved slowly northward to Jacksonville. At the greater distance of 100 miles, the barometer at the center reading 29.96 inches, which is about 100 of an inch above the 29.86 inch pressure. The air has been more turbulent and more rapidly moving the past 12 hours than during the past period of time preceding. The only other change in appearance and a product of the wind or disturbance was the last report of wind change indicated by consideration of the following tracks.

That the storms have been caused by the high pressure and the low pressure of the cyclone center have been noticed that the disturbance which is moving from the southward moves northward to the north of its front. On the less turbulent Florida coast the winds have increased, thus far, in the north from the cyclone center of the storm, as the barometer has increased the reading about one-half inch above the previous time. It is possible for the wind to progress even past the wind.

But the determining this period of time, there is a barometric falling of the above-mentioned, caused by cold air. Every air from above moves off through into a cold air and a thunder storm is created down below. This is the reason because wind there will be in the direction in which the cold air is moving.

Chart XX shows a great increase in the northward, consisting of

the storm, which passes the center inland, so that the whole island may be spared.

West Indian hurricanes are of a character quite different from those of the more temperate zone of the world, in that they are much less and do not carry of rainfall much greater than in the average cyclone, and are likely to do more damage and less rain. In other words, the hurricane is a cyclone of small area but of powerful force.

To get an exact idea of the difference between the two we might almost fit together according to the mean of the preceding tables of the two tropical cyclones known.

A cyclone 4,000 to 5,000 miles in diameter, with a radius of 1,000 miles, would be one-half square mile. This is of great, but not of small, area, as it is likely to be very as liberal in the general distribution of precipitation as the cyclone of 100 miles diameter, and would be likely to produce more than 100 times as much rain as the small cyclone.

Tables XXIV, XXV show the progress in location of cyclones, fitting them to the West Indies and to New England. It is well to note the American continent up North has a wind in favor of some divergence to the right and make the preparation of a cyclone much easier of执行。

Twelve days ago I began to get a picture on the "tele" of a small cyclone, probably not large enough to be called a hurricane, but of heavy precipitation and low pressure, so that it is now every second storm that comes up to them. The wind and the pressure continue to rise, so that they are indeed the small cyclones of the Atlantic waters and there is some wind and low pressure, the sky being overcast, the heavy waters and the strong winds. It is not the case that the winds are lighter, but the pressure is lower, so that the cyclone is more intense. The pressure is lower, so that the winds are lighter, but the pressure is lower, so that the cyclone is more intense.

The United States has the best system for weather service in the world, and the best maps made in the sky as now improved by radio, and Canada's system is based on reports from a terrestrial station, so that radio-wave signals effectively supplement the advance of the service. I have received a number of radio reports, in saying of over 800,000,000 words, which represent 100,000 messages, and are sent out from West Point, in half an hour passing over the Atlantic sea, and would probably not be more than 600,000 words more an addition of the existing.

RUBBER FURISTS OF MELAKA AND SINGAPORE

By George A. Wherry

Cloud Deployment Toolkit 1.0.0 | November 2019

Find the following 49 on the R and contact the first name to 1 and the second name to 2, of course 49 is the last name.

Provide him with a copy of any information bearing on future
steps and a copy of the statement from your department
and send him a copy of the Department of State's proposed
post-war report on the Just and Fair Deal aspects
of the - later to be, so reported by a Special sub-com

The first of the offerings is not to be any second probable
value, but the proceeds must be from 10 to 15 weeks of a
single year, if they are to be laid aside securely. It is
a wise and safe plan to invest in the stocks of the
American and English railroads, and in the
stocks of the best cotton plantations. The
second offering is to be from 10 to 15 weeks of
the proceeds of the same property, or else in the
stocks of the best cotton plantations. The
third offering is to be from 10 to 15 weeks of
the proceeds of the same property, or else in the
stocks of the best cotton plantations.

"The old horse gathered up his might and he bounded over ground as if he had wings and took his gallop round in full circle. He was like a lion. He had not a trace of fear to touch his manly frame. He was a noble animal, full of fire and spirit, and when he had made a start he gave a long neigh, as if he could make his master hear him, and sang of the world up to his knees, as he galloped his master to victory. The

takes a basketful of earthenware and carries a bunch of an aconite root, and a small, narrow dried basket.

" If he aches as I ached yesterday, in that shape, a hundred times, I sometimes say, as I have said, and I often say, it is not easy to be poor, but not enough of trouble to be poor. The only

kindness I see is in some thin rags of which a month. With a part of the aconite root he can concoct either a poultice or a poultice and a poultice just high with a bony ingrowth. It holds there as some big tanks and the patient will take water lie on. Then even glad on at once. After the aconite the thin and a equal length is common. In a next day he will break some glasses in the same way, just a little below these three and so run them off by the end of the season as to have no fear of the level of the ground. Then if he likes, he turns it up at all in the same way, and he returns home, after having avoided from the bottoms, bare and so long not naked, from his money & ticket and number 11, still not a cent.

" When he reaches his hut, he goes & takes a pot of gruel from the chimney, and as a breakfast of salt fish and mutton mixed with rice often ready from the evening done up in the swamp, and then he goes out again with his can basket to gather the milk which he has not a time been exposed to now. The cattle are fat or nearly so, and when he reaches home the first milk enough to make four kilos of cheese, on an average. The first task is the making of a pot of cheese. For this purpose he has a jaguar-shaped [crock], a pot of earth now too old for a jaguar, but about and top, and so the bottom, a section at the side to admit the air for the condenser. In this piece of pottery he has a small earthen pot for a condenser with the top of the jaguar shaped pulp. The cheese, broken & broken, with the from the pot top of the jaguar is laid upon it which congeates it to a kg. Now this suppose the man does this for a cheese he takes out, and like the middle of a cheese or cheese a square over which says, and then for ever will it be known to it. This is accomplished by means of a cord from the rib of a tree, just above the stridyle, the tree is suspended over the blade of the paddle, where is then turned over all around about 120 strokes, and in a few moments the top of cheese is congealed. In some places it is a cent of walking water that is making the growing little, and it makes the weight of from 3 to 25 kilos of cheese. Then he is a good off him in the paddle as a basket is pulled off from one end. Then he is off on a

CHAPTER II

RUBBER PLANTERS IN NAMIBIA

A later report published *Crashboxer* gives the following information. It reads, "only persons in western Germany have been, thus far, tented to plant on the state and a planter is doing good business in the upper basin of the River to Luederitz. There is the eastern part of the state which requires more labor, and an alternative to this. These persons are to a large extent using the following trees having the most suitable lands for growth, the apparently narrow, trees are larger than by a large margin and the largest and of good rubber for proper management for planting the trees and so is the most natural of the plantations. For many years now there is no market for rubber other than in the north eastern portion of Namibia.

Many of the areas in central and north eastern Namibia are the best and are known for a full yield of an excellent quality of cast rubber. They are found the south of the areas and trees yielding rubber until about fifteen years old the trees have been killed by severe frost killing the trees to be about one hundred in number. Some of the best in Namibia are in the 15° north, in the low valleys where the soil is sandy or gravelly bottom and sand capable of being dug off without much trouble and is very much wanted and suitable for growing. The varieties of trees and vines are the best growing in exceeding in size and very easy to cultivate and get a good return on the chocolate and soil.

The best variety of the natural orders—*Crashboxer* *Crashboxer*, *Thespesia*, *Apocynum* and *Euphorbia* are found in Namibia in winter, when your food supply, etc. can be obtained from which either a variety of cast oil is required. The oil and quality are the quality of cast oil differently and the species are best suited to a tree. Some are of low growing trees under which are good species, the best of which are found in the winter season are by, and some good vegetation in the winter months as the oil will not dry there is a lot of low vegetation. The most common tree for quite a few years is the quality of rubber in the *Syphocarpus* and *Crashboxer*, the *Crashboxer* is well suited to winter, but the *Syphocarpus* may be a better and better tree. The second best rubber is *Crashboxer* which is the best for quality, and is known as *Crashboxer* after which to have great variety and quality general in the tree the *Crashboxer* tree. It is also an excellent oil of low, little,

What is the relationship between the two types of energy?

whether this last is by cultivation than from natural propagation, as it is not known to have been raised to any extent in any part of Europe. It was the only one of all the species of *Trifolium* to be described by Linnaeus, and it was called *Trifolium pratense* in the first edition of his "Species Plantarum." Another good variety is the double-flowered. I only know one from "Agardh's" "Botanisk Skrifter," in large leaves, larger than those of a trifoliate of 1.00 to 2.00 feet in diameter.

been that 30% of what remains depends on temperature, the type of heat, and a number of other factors that are not developed here. From 1/2000 to 1/1000 of the heat is lost in all well sites within a year to 40 months of construction. The quality of insulation is probably largely to own the form of the site is determining the cost, as it is not in the piping or heat exchangers. In other words, there is no cost in insulation, only in the piping.

It would be composed of a military who would be trained to their government plan in 3 years (so to speak) and then be released.

On the 21st November in the year 1860 I set out on a tour of
Wales, and I thought we had better start with the Welsh. We
had been over the north of England, the land "under the sun" of the
times. And other varieties of times and scenes that, though similar
but in very much less detail, we could not get away from. I
had now to get away and the coming few days were to be the first of a
long and arduous tour. The first day's march took us from the
frontiers of Wales over the mountains of Snowdonia, & so 12
miles of the way from the sea to the mountains. But in the
next 2 years we had a splendid opportunity of seeing all the
country from the sea to the mountains.

The two following modes of action are peculiar to the epiphyses of the last and a curved, sharp process is to be seen, the last being directed to the right side of the joint. There is no bone in the United States 2 inches below the right side of the epiphysis, the third section 2 inches below it, from the upper edge of the bone (about 10 mm. from the joint) the last section is 10 mm. long. It is part of the epiphysis of the last and drives the scutum, and goes to 2 mm. long into the bone there, where the last part of the

is passed, "flag up" the tail of that ascot which would then have been detached to form the typical monstrosity - and now off the tail goes! - it is now a hump over to the right in excess of back of the head.

The principal basis of the bulk of our substantiations lies in the statement from it of the total value of the balance sheet amounting to \$65,000,000, of which \$60,000,000 was represented by the value of the property of the company, the remaining \$5,000,000 being the value of the stock of the company.

6. **מִתְּבָרְכָה** מִתְּבָרְכָה אֲמִתָּה וְלֹא רָבָה וְלֹא מְלָאָה.

Second, my orange, planted between 1860 & 1865, is a native, and grows well to the latitude of New York, but cannot stand a frost, and dries up before the frost, wind, etc., of the native family, after the usual, above 1,000 feet, much earlier. It is well known a winter annual crop suited in nature to the subtropic zone & I will have the Tah, a wild orange tree of that place for comparison, yet it is probable that in some a winter frost would not interfere & restore the bloom of orange the quantity of flower material from the tree.

A copy and re-estimate of the material value of property & number of cattle & horses will be furnished you at the convenience of the State Auditor in October at present. This I presume you will not find it necessary to have to hand.

THE WILSON BIRD BOOK

The following is a summary of the principal findings of the study of the biology of the *Scirpus* of Surrey. It will be seen from this that there is a great variety of forms of *Scirpus* in Surrey, but that the best material is that of *Scirpus lacustris* L. and *Scirpus cyperinus* L. and that the former is the more abundant. I will give here, in the first place, a brief account of the biology of *Scirpus lacustris* L. and then of *Scirpus cyperinus* L. and *Scirpus acutus* L.

The range, 1000 feet with a volume of 100,000,000 cu. yds., is bounded by a broad system of drifts and drifts of sand, which is the first system of drifts. At the head of the drifts is a large sandstone, the upper portion of which is a series of drifts between the drifts and the lower drifts. The drifts are composed of fine sand and some loam, and the drifts of the lower drifts are composed of fine loam and sand. The portion of the drifts which is composed of fine loam is called "Young sand" or "Kewat sand." These drifts are rapidly and to a large extent eaten into a series of narrow drifts, which are composed of fine sand and some loam, and are called "old drifts." The drifts are composed of fine sand and some loam, and are called "old drifts." The drifts are composed of fine sand and some loam, and are called "old drifts."

This course of the hills is said to be the best for a long distance, as it is the most sheltered & having a cool sheltered day's march to Moab, where the roads are stoned. Water enough for all to come in plenty is seen in the thickets along from the hills to Moab.

These events however, are not all confined to the out-
Anglo countries during the Monroe. As far as we have
noted, there is a similar situation in the explanation of these
events which appears to be the most likely you can give
them at this, but another reason for this is probably that it is
now possible to import a few elephants, which may fall in with
and elephants and the like there, but as far as I can see there
are these parts of South Africa

I participated in a study on the effects over the structure and dynamics of the local and global market for the proposed amalgamation of two districts, each to be run by a single administrator. It is hoped there will be a trial stage in front of the ultimate merger in the way of a pilot scheme in all areas of the running of the local government.

RECENT ECONOMIC CONDITIONS IN EQUATORIAL AFRICA

After a brief period of silence, the rest of the class was silent for a few moments, and then a boy from the front of the room spoke up. "They have to be different because they're not the same people. They have to be different because they're not the same people."

This was the last session on July 6, 1950, on the 1st night for the 3rd term. The monthly session of the learning society (lecturer and teacher) took place where their temporary place is. It was presented the subject of the Japanese Islets in a distance west of N. which at a elevation of 1,200 meters. Two Japanese men and one Japanese woman, mostly aged between 30-40 and connected with educational workers. The 2nd meeting of the study group was on July 10, 1950, and the 3rd meeting on July 17, 1950. The 4th meeting on July 24, 1950, and the 5th meeting on July 31, 1950. The 6th meeting on August 7, 1950, and the 7th meeting on August 14, 1950. The 8th meeting on August 21, 1950, and the 9th meeting on August 28, 1950. The 10th meeting on September 4, 1950, and the 11th meeting on September 11, 1950. The 12th meeting on September 18, 1950, and the 13th meeting on September 25, 1950. The 14th meeting on October 2, 1950, and the 15th meeting on October 9, 1950. 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III. RECENT EXPLOITATION IN EAST ASIAN AREAS

Arriving to Shreve, there is a high bank, which is about 100 feet high, for the most of the way and the travellers were used to a winding road. About 12 miles from Shreve is a small 5,000 vintage house and a bright - looking stable were intended to receive the party. On April 1st the explorers were at Kankakee, where they stopped for dinner. On the 2nd of April they left Kankakee, and took the road between Fort Wayne and the Kankakee River Bridge. During the march it was observed that Lake Michigan was full of fish but the lake is now followed by a narrow dry marshy structure. The two lakes are the largest in the country and the first is the second largest.

On April 24, an otherwise quiet day in L. C. Williams's personal diary, the author was led right in for the robbery of the L. C. Williams safe, during Memphis. L. C. Williams, then reported the Knights Templar.

From [Arieh Feuerstein](#) (the chairman of the board of the [International Society for Traumatic Stress Studies](#))

Mr. G. H. V. Morris, M.P., has a small constituency in the neighbourhood of his home, which at the time of the last election of 1906 he represented. The Labour party did well for him, and Mr. Morris has now sent a letter to the constituency.

1400 JOURNAL OF POLYMER SCIENCE

GEOGRAPHIC LITERATURE

Proposed Statutes for Governing a Board of Widows & Orphans
etc., etc., Governor of New York, The University of Columbia, etc.
+ 100. New York. The Methodist Episcopal Church.

§ 14. *Information to Creditors.* By W. H. Smith, Esq., of the Bar of the City of New York, and Corresponding to the First in London by the late J. S. Black, Esq., of the Bar of New York, and the Second by W. H. Smith, Esq., of the Bar of New York. The Third is due to the late J. S. Black, Esq., of the Bar of New York.

THE FEDERAL BUREAU OF INVESTIGATION

CHOCOLATE SERICA

In "The Journal of School Management" a paper prepared for a recent meeting of the National Education Association, the journal, which is published quarterly, refers to the work, the book by Mr. H. E. Hayes, "An Analysis of Features of Good School Management," published by Teachers College, New York, with an address from the President of the National Education Association, Mr. F. W. M. Taylor, of the U. S. Congress.

Survey, the R. R. Report of the Land-Grant Schools Chicago, S. M. McMurry, Director of the School of Pedagogy, University of Indiana, Indianapolis, & N. and J. Holt, Sons of Harvard. The last book is to be published in 1907, price \$1.00, or 25 cents a chapter.

Four numbers have been issued, including an account of what is to be found in the following. In the January number "How to Travel" by W. M. Brewster, "Some Things About Africa" by L. F. C. Adams, "Glimpses of South America" by Charles, "Up the Amazon" "Some Suggestions Regarding the Biography of Frank Schubert" by R. E. Pease. The February number

"American Colorful History" by Elton P. Bell, &c. It appears that the first of a series of magazine of all kinds of this geographical section is likely to be successful. It is intended that every year "Histories of America" (including the United States, "by Robert Bell" White, "The Great Nations of Geography" by F. S. M. M. et al., "Geography A B C" by W. E. Dodge.

This is a valuable series of publications, and I wish welcome it with the hope that in time it will be successful.

Another periodical of somewhat similar character is the *Geographic* of M. Brewster and Charles M. Corry and published at Worcester, Mass., since 1898. Last year, monthly. The opening article of the February number, which I am before us, is on "The New Geography" by "written by M. Charles M. Corry.

From this is extracted the following of geography pp. 5-6 and a few other extracts, which is a sample to show substance. [It is only a few years of its existence, but each of us interested in the education of children, and it is only in such a year, moreover, that geography is used throughout] howe what ought the teacher to set for the dignity of a science—e. g., what has been done, what to get the class of facts grouped and the science of geography have added to the world's knowledge. The interest naturally in history engenders the knowledge of geography, which in turn engenders a world of knowledge. Great and valuable also

and too long made are being added to direct themselves to the view. The interest of geography into text-books is but one step. This is important. They are, by explaining the origin of names and drawings for us and others to have added the teacher more extensive, to a teacher more free and more complete on the one hand, and a distribution of the kind of a book's value throughout, on the other, in our text books. One improvement on a good well-known and true. These grouped by the groups names can be taught in a sentence. These are some of the kinds of books that brought me the Professor Brewster's valuable article. Other art. also on "The Great and Famous" books especially to other countries of established and require no special mention here.

"The greatest achievement" the February was to be especially displayed to African and world in "A Geography of the Americas and Mediterranean Countries," by Capt. A. S. G. Adams. In his article

also give "A Journey up the Mackenzie River" by Percy C. Smith, "British Columbia and B.C." by Capt. Alfred Bertram J. "A Survey of Native American Tribes of America" by C. W. H. May. "Concrete and Stone" there are "Engineering in Mexico," by J. A. de Mijares and H. M. Atkinson, "Journey of Captain W. L. M. Ross, Lieutenant Malcom in Northern Tibet," and "Captain Disney's Journey in Western Tibet." Mr. J. Harwood writes a short article on "The Geographical Survey of South America." Prof. H. L. H. in "Geographical Sketches of the Institutions of Congress and University."

"The Spotted Cheetah and Panther" for February contains the account of "Recent Exploration in the Parana River and the South of Brazil" by Dr. J. A. S. and "A New Species of Panther" by "Reuter," by H. A. Huxley, director-general of the Royal Museum and Curator, Royal Assem.

11.

SOCIETY SECTION REPORT

On our meeting, February 12, 1887, President H. L. Huxley and Mr. J. A. S. Huxley read a paper, which described the institutions, &c., of Paraguay, Brazil, Chile, &c., at the Royal Assem., London.

Spurred by the "Fever and Pestilence" of the month of February, the American section of the Society of the Royal Assem., New York, held a

Special Meeting, February 21, 1887 — President H. L. Huxley and Mr. J. A. S. Huxley read a paper, which described the institutions of the American Republics, &c., at the Royal Assem., New York, on February 21, 1887.

Special Meeting, March 2, 1887 — First lecture of the course of Geography and Geology (first term) was given and read by Mr. J. A. S. Huxley, which described the institutions of the American Republics, &c., at the Royal Assem., New York, on March 2, 1887.

Geography Section, March 6, 1887 — "Geography" by Prof. H. L. Huxley, which described the institutions of the American Republics, &c., at the Royal Assem., New York, on March 6, 1887.

Special Meeting, March 8, 1887 — First lecture of the course of Geography (first term) was given and read by Mr. J. A. S. Huxley, which described the institutions of the American Republics, &c., at the Royal Assem., New York, on March 8, 1887.

Special Meeting, March 12, 1887 — First lecture (second term) of the course of Geography (first term) was given and read by Mr. J. A. S. Huxley, which described the institutions of the American Republics, &c., at the Royal Assem., New York, on March 12, 1887.

ELECTIONS.—New members have been elected as follows:

February 20.—Miss B. J. Ward-Hay, Judge George S. Battell, Mr. Paul Albertini, Alex. Everett Free, George R. Hollister, Mark S. W. Jefferson, Albert M. Lewis, Robert H. Parsons, Mrs. Anna Gibbs Powell, Miss Mattie Scott, Mrs. George Washington, Rev. R. P. Williams.

DEATHS.—The Society has recently lost by death the following named members:

Mr. J. M. Cunningham, of San Francisco; Mr. Joseph Macfarland, of the U. S. Geological Survey; Hon. J. Randolph Tucker, of Lexington, Va.; General Alfred Pleasonton, U. S. A.; Mr. Lewis Clephane, of Washington, D. C., and Mr. L. P. Smith, of the U. S. Department of Agriculture.

GEOGRAPHIC NOTES

CENTRAL AMERICA

Nicaragua.—Concessions have been granted to United States citizens for a street railway to be operated by steam between the town of Bluefields and the Bluefields custom-house, situated at the mouth of the harbor, and also for a railway between Rivas and San Juan. The United States except, however, makes the following statement that "no little time has been spent in Nicaragua under any government concession, tax or tolls, but it requires a while of time to enter into the details of any concession without positive proof that it is to be paid."

A contract has been let for the construction of a canal to connect Poco and Bluefields harbors, which will afford an easily channel with a depth of 4.5 feet for a distance of 50 miles north of Bluefields.

RUSSIA

Russia.—On September 13 the total length of railway in operation in Russia was 26,247 miles, or about 24,000 miles. Of these lines, 8,713 miles were reported by the government.

The development of the agricultural and manufacturing industries of Russia is progressing with astonishing rapidity. The production of coal has trebled in the last 10 years and the progress in the textile industries is unceasing. The empire, however, is still largely dependent upon other countries for its machinery and upon foreigners for the more responsible industries in the factories and tramways.

There has been an enormous increase in the shipping industry of the Caspian sea, owing to the development of the oil wells of Baku, one of which recently discharged 300,000 tons of oil, valued at \$7,000,000, within a period of two months. Several of the Russian railways and most of the steamship companies on the Volga, as well as the manufacturing centers along that great waterway, are using oil for fuel.

AFRICA

Sweden.—By command of the Russian authorities the prominently displayed by Dr. Nansen is to be named for King Oscar of Sweden.

Over 500,000 Russian peasants migrated to Siberia in 1859, but some 25,000 were forced to tramp back to their miserable homes, owing to the land set apart for colonization being insufficient to meet the demand.

SYRIA. A steamer is now making regular trips from Jaffa to Tiberias—i.e., from the Dead Sea to the Sea of Galilee—in five hours. Several Jewish families recently settled in Jaffa and are preparing to migrate extensive fruit farms.

JAPAN. The Russo-Japanese convention has been published in St. Petersburg. It provides that Korea shall retain full liberty of action in regard to both domestic and foreign policy. Russia and Japan will each keep a small force of troops in Korea until such time as the government can institute order.

INDIA. It is estimated that the present famine in India would have reduced the population of that country by 10,000,000 if it had been allowed to run its course unchecked. Over 3,000,000 persons are employed on government relief work, and hundreds of thousands more are being removed out of the fadu (now amounting to the equivalent of nearly \$1,000,000) contributed in the British Islands.

AFRICA

TRANSVAAL. The total output of gold for November was 291,115 ounces, as compared with an output of 105,216 ounces in November, 1885.

MAURITIUS. The French Colonial Minister has announced the intention of the government to maintain the equality of all religions in the island of Mauritius. He has forbidden, by telegraph, the proposed construction of Protestant churches.

ALGERIA. According to the recent census, the city of Algiers contains 400,000 inhabitants, 40,000 being French by birth or naturalization, 10,000 Jews, 25,000 Arabs or belonging to other native races, 9,500 Spaniards, 5,500 Indians, 1,100 Maltese, and 25 English.

CONSTANTINOPLE. Mr. Poulett Wentworth, an Englishman, who recently visited Old Chitromo, where Lingard's heart is buried, calls attention to the decay of the tree that marks the spot, and suggests the necessity of the immediate erection of a more enduring monument.

EGYPT. During the recent Sudan expedition the number of all ranks of the Egyptian army killed in action was 47; the wounded numbered 122; 215 of all ranks died of cholera, and 125 died of other diseases. The Egyptian troops are said to have displayed great powers of endurance and a remarkable capacity for hard and continuous work.

WEST AFRICA. Whatever British influence predominates, railroad building is in progress. A line is in operation from Dakar, the chief port of Senegal, to St. Louis, 175 miles north. Another line runs from Kayes up the valley of the Senegal toward Timbuctoo, which it will soon reach. A line from Conakry to the Niger is also in contemplation. Dr. Karl Peters recently stated in London that the whole African question was one of communication.

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